

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM S-1  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**APIIAN CORPORATION**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

7372  
(Primary Standard Industrial  
Classification Code Number)  
11955 Democracy Drive, Suite 1700  
Reston, Virginia 20190  
(703) 442-8844

54-1956084  
(I.R.S. Employer  
Identification Number)

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Matthew Calkins  
Chief Executive Officer and Chairman  
Appian Corporation  
11955 Democracy Drive, Suite 1700  
Reston, Virginia 20190  
(703) 442-8844

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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**Approximate date of commencement of proposed sale to the public:** As soon as practicable after the effective date of this registration statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer

Accelerated Filer

Non-accelerated Filer

Smaller Reporting Company

Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

**CALCULATION OF REGISTRATION FEE**

Title of Each Class of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Class A Common Stock, \$0.0001 par value per share	4,370,000	\$22.615	\$98,827,550	\$12,304.03

(1) Includes shares the underwriters have the option to purchase.

(2) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(c) under the Securities Act on the basis of the average of the high and low prices of the Registrant's Class A common stock as reported on the NASDAQ Global Market on November 10, 2017.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment that specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and the selling stockholders are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS (Subject to Completion)  
 Issued November 13, 2017

3,800,000 Shares

# Appian

CLASS A COMMON STOCK

The selling stockholders identified in this prospectus are offering 3,800,000 shares of our Class A common stock. We are not selling any shares of Class A common stock under this prospectus, and we will not receive any of the proceeds from the shares of Class A common stock sold by the selling stockholders.

We have two classes of authorized common stock, Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to ten votes per share and is convertible into one share of Class A common stock. Outstanding shares of Class B common stock will represent approximately 98% of the voting power of our outstanding capital stock immediately following the closing of this offering, and outstanding shares of Class B common stock beneficially owned by our co-founder, CEO and Chairman, Matthew Calkins, will represent approximately 56% of the voting power of our outstanding capital stock immediately following the closing of this offering.

Our Class A common stock is listed on the NASDAQ Global Market under the symbol "APPN." On November 10, 2017, the last sale price of our Class A common stock as reported on the NASDAQ Global Market was \$22.60 per share.

We are an "emerging growth company" as defined under the U.S. federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements for this and future filings.

Investing in our Class A common stock involves risks. See "Risk Factors" beginning on page 11.

PRICE \$ A SHARE

	Price to Public	Underwriting Discounts and Commissions <sup>(1)</sup>	Proceeds to Selling Stockholders
Per Share .....	\$	\$	\$
Total .....	\$	\$	\$

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

The selling stockholders have granted the underwriters the right to purchase up to an additional 570,000 shares of Class A common stock.

The Securities and Exchange Commission and state securities regulators have not approved or disapproved of these securities, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of Class A common stock to purchasers on \_\_\_\_\_, 2017.

MORGAN STANLEY GOLDMAN SACHS & CO. LLC BARCLAYS  
 WILLIAM CANACCORD KEYBANC CAPITAL COWEN SUNTRUST ROBINSON BTIG  
 BLAIR GENUITY MARKETS HUMPHREY

, 2017

# Appian

## The Digital Transformation Platform.™



# App

The world's innovative organizations run A

Complete airport  
digitization with 40 apps  
delivered in 18 months



Retirement of  
applications s  
in annual opera



Automated 8 major  
business functions  
in 17 months



Cost savings  
at \$10 millio



# oian

Appian to accelerate digital transformation.

f hundreds of  
aving millions  
ating expenses



50% reduction in truck  
rental transaction times



s estimated  
on annually



25 customer-focused  
enterprise applications  
deployed in 18 months



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You should rely only on the information contained in this document and any free writing prospectus we may authorize to be delivered or made available to you. We, the selling stockholders and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectus prepared by us or on our behalf. We, the selling stockholders and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date, regardless of the time of delivery of this prospectus or any sale of shares of our Class A common stock.

For investors outside the United States: We, the selling stockholders and the underwriters have not done anything that would permit this offering or the possession or distribution of this prospectus in any jurisdiction where action for those purposes is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of Class A common stock and the distribution of this prospectus outside of the United States.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our Class A common stock, you should carefully read this entire prospectus, including our consolidated financial statements and the related notes and the information set forth under the sections titled “Risk Factors,” “Special Note Regarding Forward-Looking Statements,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” in each case included elsewhere in this prospectus. Unless the context otherwise requires, we use the terms “Appian,” “company,” “our,” “us,” and “we” in this prospectus to refer to Appian Corporation and, where appropriate, our consolidated subsidiaries.*

## APPIAN CORPORATION

### Overview

Appian provides a leading low-code software development platform as a service that enables organizations to rapidly develop powerful and unique applications. The applications created on our platform help companies drive digital transformation and competitive differentiation.

With our platform, organizations can rapidly and easily design, build and implement powerful, enterprise-grade custom applications through our intuitive, visual interface with little or no coding required. Our customers have used applications built on our low-code platform to launch new business lines, automate vital employee workflows, manage complex trading platforms, accelerate drug development and build global procurement systems. With our platform, decision makers can reimagine their products, services, processes and customer interactions by removing much of the complexity and many of the challenges associated with traditional approaches to software development.

Organizations across industries are digitally transforming—leveraging software to automate and optimize mission critical operations, enhance customer experiences and drive competitive differentiation. Historically, organizations have principally relied on packaged software and custom software solutions to operationalize and automate their businesses. However, these solutions are challenged in their ability to facilitate effective software-enabled digital transformation.

We enable organizations to differentiate themselves from their competition through software-enabled digital transformation. Our low-code platform employs an intuitive, visual interface and pre-built development modules that reduce the time required to build powerful and unique applications. We believe that developing applications on our platform can be as simple as drawing a picture. Our platform automates the creation of forms, data flows, records, reports and other software elements that would otherwise need to be manually coded or configured. This functionality greatly reduces the iterative development process, allowing for real-time application optimization and ultimately shortening the time from idea to deployment. Further, our patented Self-Assembling Interface Layer, or SAIL, technology ensures that applications developed on our platform can be immediately and natively deployed across a full range of mobile and desktop devices with no additional customization, including desktop web browsers, tablets and mobile phones. Updates to applications developed with SAIL disseminate automatically across device types to ensure that all users benefit from the most up-to-date functionality. At the same time, we unify enterprise data in a single searchable environment, providing organizations with a comprehensive view of customer, product, organizational asset and other critical information. Rich reporting dashboards capture detailed performance metrics, providing valuable business intelligence and analytics that enable business process optimization. Moreover, our platform can be deployed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases.

Our go-to-market strategy consists of both direct sales and sales through strategic partners. In 2017, almost half of our new customer deals were influenced by our partners. We sell our software almost exclusively through subscriptions and intend to grow our revenue both by adding new customers and increasing the number of users at existing customers that use applications developed on our platform. In addition, we sell professional services to drive customer success by helping customers build and deploy applications on our platform.

As of December 31, 2016, we had 280 customers in a wide variety of industries, of which 225 customers were commercial and 55 customers were government or non-commercial entities. Our customers include financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation organizations. As of December 31, 2016, 32% of our commercial customers were Global 2000 organizations, and included 37 Fortune 500 companies, six of the largest 25 global financial services firms by 2016 revenue and eight of the 30 largest global healthcare companies by 2016 revenue. We determined relevant global financial services and healthcare companies by referencing certain independent industry data from S&P Global Market Intelligence. Customers receive all of the modules and functionality of our platform with their initial subscription, which facilitates the seamless creation of new applications. Many of our customers begin by building a single application and grow to build dozens of applications on our platform, which implicitly reduces the per-user cost of each application. Generally, the development of new applications results in the expansion of our user base within an organization and a corresponding increase in revenue to us because we charge subscription fees on a per-user basis for the significant majority of our customer contracts.

We believe that we have a significant market opportunity in helping organizations accelerate their digital transformation by leveraging our low-code software development platform. Our current core software markets, which include the markets for low-code development platforms, case management software, business process management and platform-as-a-service, are expected to represent a combined \$25.0 billion market opportunity by 2018 and a combined \$45.7 billion market opportunity in the near term. In addition to our current core software markets, we believe that our platform better meets the needs that have been historically addressed by manually-developed custom enterprise software, which is expected to represent a \$169 billion market in 2018.

We have experienced strong revenue growth, with revenue of \$89.0 million, \$111.2 million, \$132.9 million and \$126.2 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. Our subscription revenue was \$22.8 million, \$41.5 million, \$60.0 million and \$59.3 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively, representing year-over-year growth rates of 82% from 2014 to 2015, 45% from 2015 to 2016 and 37% from the nine months ended September 30, 2016 to the nine months ended September 30, 2017. Our professional services revenue was \$51.9 million, \$58.0 million, \$63.0 million and \$60.1 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. Over time, as the need for professional services associated with user deployments decreases and the number of end users increases, we expect the mix of total revenue to shift more toward subscription revenue.

We have invested, and intend to continue to invest, in developing our platform, expanding our sales and marketing and research and development capabilities, and providing general and administrative resources to support our growth. As a result, we incurred net losses of \$17.1 million, \$7.0 million, \$12.5 million and \$24.1 million in 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively. We also had operating cash flows of \$1.5 million, \$(2.1) million, \$(7.8) million and \$(10.1) million in 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively.

## **Industry Background**

**Software-enabled digital transformation.** Organizations across industries are digitally transforming—leveraging software to automate and optimize mission critical operations, enhance customer experiences and drive competitive differentiation. Several key trends are fueling software-enabled digital transformation, including the rise of cloud computing and the Internet of Things and the proliferation of mobile devices.



**Challenges to effective digital transformation.** Historically, organizations have principally relied on packaged software and custom software solutions to operationalize and automate their businesses. However, these solutions are challenged in their ability to facilitate effective software-enabled digital transformation. More specifically:

- **Packaged software is inadequate.** Packaged software, whether delivered in the cloud or on-premises, is a one-size-fits-all solution that performs industry-agnostic functions or serves specific industry verticals without organization-specific differentiation. Organizations are often unable to use packaged software to address unusual use cases and differentiate themselves and must conform their individual processes, needs and systems of record to standardized frameworks and potentially adopt numerous point solutions that can be difficult to integrate.
- **Traditional custom software solutions are expensive and difficult to create.** In contrast, traditional custom solutions are built to address particular organization-specific use cases. Although this allows organizations to better manage their operations and differentiate their businesses, traditional custom software solutions have historically been hampered by several limitations:
  - Traditional application development is a long and cumbersome process, requiring complex coding and an iterative feedback cycle.
  - The proliferation in mobile devices and the competition among mobile device manufacturers means that device operating systems are continuously being updated, modified and customized for specific hardware configurations.
  - The need for organizations to manage their operations utilizing all of these devices and environments necessitates costly integrations in an attempt to avoid creating information silos.
  - Developer talent is scarce and hiring developers to create custom software is costly.

Low-code software development platforms have emerged to address the limitations associated with packaged software and traditional custom software solutions. However, many existing low-code platforms are either limited in functionality such that they do not support the development of enterprise-grade applications or continue to require significant manual coding, and therefore are not truly “low-code.”

### **Benefits of Our Platform**

We enable organizations to differentiate themselves from their competition through software-enabled digital transformation. Key benefits of our platform include:

- **Rapid and simple innovation through our powerful platform.** Our low-code platform employs an intuitive, visual interface and pre-built development modules that reduce the time required to build powerful and unique applications.
- **Powerful applications to solve complex challenges.** At the core of our platform is an advanced engine that enables the modeling, modification and management of complex processes and business rules. Organizations have used our platform to launch new business lines, build large procurement systems, manage retail store layouts, conduct predictive maintenance on field equipment and manage trading platforms, among a range of other use cases.
- **Create once, deploy everywhere.** Our patented SAIL technology allows developers to create an application once and deploy it across a full range of mobile and desktop devices with no additional customization with the consistency of experience and optimal performance levels that users expect.
- **Seamless integration with existing systems and data.** In contrast to typical enterprise software, our platform does not require that data reside within it in order to enable robust data analysis and cross-department and cross-application insight. Our platform seamlessly integrates with many of the most popular enterprise software applications and data repositories and can be used within many legacy environments.

- **Deployment flexibility to serve customer needs.** Our platform can be installed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases.
- **Industry-leading security.** Our platform is designed to meet the highest demands of our federal government and large enterprise customers. Our cloud platform holds some of the highest security certifications from government agencies and industry organizations.

Our approach to digital transformation goes beyond simply enabling organizations to build custom applications fast. We empower decision makers to reimagine their products, services, processes and customer interactions with software by removing much of the complexity and many of the challenges associated with traditional approaches to software development.

### **Our Growth Strategy**

Key elements of our growth strategy include:

- **Expand our customer base.** We believe that the market for our software development platform is in its early stages and that we have a significant opportunity to add additional large enterprise and government customers.
- **Grow through our differentiated land and expand model.** Customers receive all of the modules and functionality of our platform with their initial subscription, which facilitates the seamless creation of new applications. Generally, the development of new applications results in the expansion of our user base within an organization and a corresponding increase in revenue to us because we usually charge subscription fees on a per-user basis.
- **Grow revenue from key industry verticals.** While our platform is industry-agnostic, we have recently made, and plan to continue to make, investments to enhance the expertise of our sales and marketing organization within our key industry verticals of financial services, healthcare and government.
- **Continue to innovate and enhance our platform.** We have made, and will continue to make, investments in research and development to strengthen our platform and expand the number of features available to our customers. As we continue to increase the functionality of our platform and further reduce the amount of developer skill that is required to build robust applications on our platform, we believe that we have the potential to expand the use of our platform.
- **Expand our international footprint.** Our platform is designed to be natively multi-lingual to facilitate collaboration and address challenges in multi-national organizations. We are investing in new geographies, including through investment in direct and indirect sales channels, professional services and customer support and implementation partners.
- **Grow our partner base.** We have several strategic partnerships, including with Deloitte, KPMG and PricewaterhouseCoopers. These partners work with organizations that are undergoing digital transformation projects and are therefore able to refer potential customers to us. We intend to further grow our base of partners to provide broader customer coverage and solution delivery capabilities.

### **Selected Risks Affecting Our Business**

Investing in our Class A common stock involves risk. You should carefully consider all the information in this prospectus prior to investing in our Class A common stock. These risks are discussed more fully in the section entitled “Risk Factors” immediately following this prospectus summary. These risks and uncertainties include, but are not limited to, the following:

- Our recent growth may not be indicative of our future growth and, if we continue to grow, we may not be able to manage our growth effectively;

- If we are unable to sustain our revenue growth rate, we may not achieve or maintain profitability in the future;
- We may not be able to scale our business quickly enough to meet our customers' growing needs, and if we are not able to grow efficiently, our operating results could be harmed;
- We are dependent on a single solution, and the lack of continued market acceptance of our platform could cause our operating results to suffer;
- We currently face significant competition;
- If our security measures are breached or unauthorized access to our platform or customer data is otherwise obtained, our platform may be perceived as not being secure, customers may reduce the use of or stop using our platform and we may incur significant liabilities;
- We have experienced losses in the past, and we may not achieve or sustain profitability in the future;
- Our future quarterly results of operations may fluctuate significantly due to a wide range of factors, which makes our future results difficult to predict;
- We derive a material portion of our revenue from a limited number of customers, and the loss of one or more of these customers could adversely impact our business, results of operations and financial condition;
- We may not be able to continue to shift our revenue towards subscriptions and away from professional services; and
- The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who hold Class B common stock, which is entitled to ten votes per share, as opposed to the Class A common stock that the selling stockholders are offering, which is entitled to one vote per share. Specifically, outstanding shares of Class B common stock will represent approximately 98% of the voting power of our outstanding capital stock following this offering, and outstanding shares of Class B common stock beneficially owned by our founder, Chief Executive Officer and Chairman, Matthew Calkins, will represent approximately 56% of the voting power of our outstanding capital stock following this offering.

#### **Corporate Information**

Appian Corporation was incorporated under the laws of the State of Delaware in August 1999.

Our principal executive offices are located at 11955 Democracy Drive, Suite 1700, Reston, Virginia 20190. Our telephone number is (703) 442-8844. Our website address is [www.appian.com](http://www.appian.com). The information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our Class A common stock.

"Appian", the Appian logo, and other trademarks or service marks of Appian Corporation appearing in this prospectus are the property of Appian Corporation. This prospectus contains additional trade names, trademarks and service marks of others, which are the property of their respective owners. Solely for convenience, trademarks and trade names referred to in this prospectus may appear without the ® or ™ symbols.

#### **Our Initial Public Offering**

In May 2017, we completed an initial public offering, or IPO, in which we sold 7,187,500 shares of our newly-authorized Class A common stock at an initial price to the public of \$12.00 per share. We received net

proceeds of \$77.8 million, after deducting underwriting discounts and commissions and offering expenses paid and payable by us, from sales of our shares in the IPO. Immediately prior to the completion of the IPO, (1) all shares of common stock then outstanding were converted into Class B common stock on a one-for-one basis, (2) a warrant to purchase shares of convertible preferred stock was converted into a warrant to purchase shares of Class B common stock and (3) all shares of convertible preferred stock then outstanding were converted into shares of our Class B common stock on a one-for-one basis.

#### **Implications of Being an Emerging Growth Company**

We qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. An emerging growth company may take advantage of specified reduced reporting and other burdens that are otherwise applicable generally to public companies. These provisions include:

- a requirement to have only two years of audited financial statements and only two years of related selected financial data and management’s discussion and analysis of financial condition and results of operations disclosure;
- an exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act;
- an exemption from implementation of new or revised financial accounting standards until they would apply to private companies and from compliance with any new requirements adopted by the Public Company Accounting Oversight Board requiring mandatory audit firm rotation;
- reduced disclosure obligations regarding executive compensation arrangements; and
- no requirement to seek nonbinding advisory votes on executive compensation or golden parachute arrangements.

We may take advantage of some or all these provisions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier to occur of (a) December 31, 2022, (b) the last day of the fiscal year in which we have total annual gross revenues of at least \$1.07 billion, (c) the last day of the fiscal year in which we are deemed to be a “large accelerated filer,” under the rules of the U.S. Securities and Exchange Commission, or SEC, which means the market value of our equity securities that is held by non-affiliates exceeds \$700 million as of the prior June 30th, and (d) the date on which we have issued more than \$1.0 billion in non-convertible debt during the prior three-year period.

We have elected to take advantage of the extended transition period to comply with new or revised accounting standards and to adopt certain of the reduced disclosure requirements available to emerging growth companies. As a result of the accounting standards election, we will not be subject to the same implementation timing for new or revised accounting standards as other public companies that are not emerging growth companies which may make comparison of our financials to those of other public companies more difficult. In addition, the information that we provide in this prospectus may be different than the information you may receive from other public companies in which you hold equity interests. Further, it is possible that some investors will find our Class A common stock less attractive as a result of these elections, which may result in a less active trading market for our Class A common stock and higher volatility in our stock price.

**THE OFFERING**

Class A common stock offered by the selling stockholders	3,800,000 shares
Class A common stock to be outstanding after this offering	11,003,271 shares
Class B common stock to be outstanding after this offering	49,468,659 shares
Total Class A common stock and Class B common stock to be outstanding after this offering	60,471,930 shares
Underwriters' option of Class A common stock offered by the selling stockholders	570,000 shares

Voting rights

We have two classes of authorized common stock: Class A common stock and Class B common stock. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion. The holders of Class A common stock are entitled to one vote per share, and the holders of Class B common stock are entitled to ten votes per share, on all matters that are subject to stockholder vote. The holders of Class B common stock also have approval rights for certain corporate actions. Each share of Class B common stock may be converted into one share of Class A common stock at the option of its holder and will be automatically converted into one share of Class A common stock upon transfer thereof, subject to certain exceptions. In addition, upon the date on which the outstanding shares of Class B common stock represent less than 10% of the aggregate voting power of our capital stock, all outstanding shares of Class B common stock shall convert automatically into Class A common stock. See the section of this prospectus captioned "Description of Capital Stock" for additional information.

Holders of our Class A common stock and Class B common stock will generally vote together as a single class, unless otherwise required by law or our amended and restated certificate of incorporation. Mr. Calkins, who after this offering will beneficially own approximately 56% of the voting power of our outstanding capital stock, will have the ability to control the outcome of matters submitted to our stockholders for approval, including the election of

our directors. See “Principal and Selling Stockholders” and “Description of Capital Stock.”

Use of proceeds

The selling stockholders will receive all of the net proceeds from this offering. We will not receive any of the proceeds from the sale of Class A common stock offered by the selling stockholders. We will, however, bear the costs associated with the sale of shares by the selling stockholders, other than underwriting discounts and commissions.

Risk factors

See “Risk Factors” and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our Class A common stock.

NASDAQ Global Market symbol

“APPN”

The number of shares of our Class A common stock and Class B common stock that will be outstanding after this offering is based on 7,203,271 shares of Class A common stock and 53,073,459 shares of Class B common stock outstanding as of September 30, 2017, and excludes:

- 7,375,928 shares of Class B common stock issuable upon the exercise of options outstanding as of September 30, 2017, at a weighted-average exercise price of \$6.14 per share, of which 195,200 shares are expected to be issued upon the exercise of options by some of the selling stockholders in connection with this offering;
- 8,000 shares of Class A common stock issuable upon the exercise of options outstanding as of September 30, 2017, at a weighted-average exercise price of \$20.27 per share, and 42,925 shares of Class A common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2017;
- 4,000 shares of Class A common stock issuable upon the exercise of options granted subsequent to September 30, 2017, at a weighted-average exercise price of \$22.27 per share, and 689,200 shares of Class A common stock issuable upon the vesting of restricted stock units granted subsequent to September 30, 2017; and
- 6,481,622 shares of Class A common stock reserved for future issuance as of September 30, 2017 pursuant to our 2017 Equity Incentive Plan.

Unless otherwise indicated, this prospectus reflects and assumes the following:

- no exercise of outstanding options after September 30, 2017; and
- no exercise by the underwriters of their option to purchase additional shares of our Class A common stock.

## SUMMARY CONSOLIDATED FINANCIAL AND OTHER DATA

We derived the summary consolidated statements of operations data for the years ended December 31, 2014, 2015 and 2016 from our audited consolidated financial statements included elsewhere in this prospectus. We derived the summary consolidated statements of operations data for the nine months ended September 30, 2016 and 2017 and the summary consolidated balance sheet as of September 30, 2017 from the unaudited condensed consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited condensed consolidated financial statements on the same basis as the audited consolidated financial statements, and the unaudited financial data include, in our opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of our consolidated financial position and results of operations for these periods. Our historical results are not necessarily indicative of the results to be expected in the future and our operating results for the nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2017.

When you read this summary consolidated financial data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as “Selected Consolidated Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” included elsewhere in this prospectus.

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
(in thousands, except share and per share data)					
<b>Consolidated Statements of Operations Data:</b>					
Revenue:					
Subscriptions, software and support	\$ 37,076	\$ 53,207	\$ 69,972	\$ 50,607	\$ 66,116
Professional services	51,920	57,997	62,951	48,569	60,059
Total revenue	88,996	111,204	132,923	99,176	126,175
Cost of revenue:					
Subscriptions, software and support	4,273	6,079	7,437	5,508	6,891
Professional services	32,524	42,402	42,686	34,016	39,049
Total cost of revenue	36,797	48,481	50,123	39,524	45,940
Gross profit	52,199	62,723	82,800	59,652	80,235
Operating expenses:					
Sales and marketing	29,088	38,300	54,137	39,477	59,503
Research and development	13,488	16,750	22,994	16,925	25,867
General and administrative	23,373	12,515	17,039	12,779	19,721
Total operating expenses	65,949	67,565	94,170	69,181	105,091
Operating loss	(13,750)	(4,842)	(11,370)	(9,529)	(24,856)
Other expense (income):					
Other expense (income), net	2,086	1,579	1,792	129	(1,658)
Interest expense	19	188	982	726	451
Total other expense (income)	2,105	1,767	2,774	855	(1,207)
Net loss before income taxes	(15,855)	(6,609)	(14,144)	(10,384)	(23,649)
Income tax expense (benefit)	1,204	378	(1,683)	(2,106)	489
Net loss	(17,059)	(6,987)	(12,461)	(8,278)	(24,138)
Accretion of dividends on convertible preferred stock	856	861	857	642	357
Net loss attributable to common stockholders	\$ (17,915)	\$ (7,848)	\$ (13,318)	\$ (8,920)	\$ (24,495)
Net loss per share attributable to common stockholders, basic and diluted <sup>(1)</sup>	\$ (0.50)	\$ (0.23)	\$ (0.39)	\$ (0.26)	\$ (0.53)
Weighted-average common shares outstanding, basic and diluted	35,717,803	34,274,718	34,274,718	34,274,718	45,855,044

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- (1) See note 9 to our audited consolidated financial statements appearing elsewhere in this prospectus for further details on the calculation of basic and diluted net loss per share attributable to common stockholders.

	As of September 30, 2017 <u>(in thousands)</u>
<b>Consolidated Balance Sheet Data:</b>	
Cash and cash equivalents	\$ 72,289
Working capital <sup>(1)</sup>	51,539
Total assets	142,326
Deferred revenue, net of current portion	14,577
Total liabilities	92,422
Accumulated deficit	(89,320)
Total stockholders' equity	49,904

- (1) We define working capital as current assets less current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

### Other Metrics

In addition to our financial results, we monitor the following metrics to help us measure and evaluate the effectiveness of our operations. For a description of how we calculate these metrics, as well as their uses, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Other Metrics.”

	<u>Year Ended December 31,</u>			<u>Nine Months Ended September 30,</u>	
	2014	2015	2016	2016	2017
	(dollars in thousands)				
Subscription Revenue	\$22,849	\$41,497	\$59,993	\$43,397	\$59,284
Subscription Revenue Retention Rate	107%	128%	112%	118%	122%



## RISK FACTORS

*Investing in our Class A common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes, before deciding whether to purchase shares of our Class A common stock. If any of the following risks are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the price of our Class A common stock could decline, and you could lose part or all of your investment.*

### **Risks Related to Our Business and Industry**

***Our recent growth may not be indicative of our future growth and, if we continue to grow, we may not be able to manage our growth effectively.***

We have recently experienced a period of rapid growth in our headcount and operations. In particular, we grew from 173 employees as of December 31, 2011 to 830 employees as of September 30, 2017, and we have also significantly increased the size of our customer base over the last several years. We anticipate that we will continue to significantly expand our operations and headcount in the near term. Our growth has placed, and future growth will place, a significant strain on our management, administrative, operational and financial infrastructure. Our success will depend in part on our ability to manage this growth effectively. To manage the expected growth of our operations and personnel, we will need to continue to improve our operational, financial and management controls and our reporting systems and procedures. Failure to effectively manage our growth could result in difficulty or delays in deploying our platform to customers, declines in quality or customer satisfaction, increases in costs, difficulties in introducing new features or other operational difficulties. Any of these difficulties could adversely impact our business performance and results of operations.

Our rapid growth also makes it difficult to evaluate our future prospects. Our ability to forecast our future operating results is subject to a number of uncertainties, including our ability to plan for and model future growth. If our assumptions regarding these uncertainties, which we use to plan our business, are incorrect or change in reaction to changes in our markets, or if we do not address these risks successfully, our operating and financial results could differ materially from our expectations, our business could suffer and the trading price of our stock may decline.

***If we are unable to sustain our revenue growth rate, we may not achieve or maintain profitability in the future.***

We have experienced revenue growth with revenue of \$89.0 million, \$111.2 million, \$132.9 million and \$126.2 million in 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively. Although we have experienced rapid revenue growth historically, we may not continue to grow as rapidly in the future and our revenue growth rates may decline. Any success that we may experience in the future will depend in large part on our ability to, among other things:

- maintain and expand our customer base;
- increase revenue from existing customers through increased or broader use of our platform within their organizations;
- further penetrate the existing industry verticals that we serve and expand into other industry verticals;
- improve the performance and capabilities of our platform through research and development;
- continue to successfully expand our business domestically and internationally; and
- successfully compete with other companies.

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If we are unable to maintain consistent revenue or revenue growth, our stock price could be volatile, and it may be difficult to achieve and maintain profitability. You should not rely on our revenue for any prior quarterly or annual periods as any indication of our future revenue or revenue growth.

***We may not be able to scale our business quickly enough to meet our customers' growing needs, and if we are not able to grow efficiently, our operating results could be harmed.***

As usage of our platform grows and as customers use our platform for more advanced and more frequent projects, we may need to devote additional resources to improving our software architecture, integrating with third-party systems, and maintaining infrastructure performance. In addition, we will need to appropriately scale our internal business as well as grow our partner services systems, including our professional services organization and operations, to serve our growing customer base, particularly as our customer base expands over time. Any failure of or delay in these efforts could cause impaired system performance and reduced customer satisfaction. These issues could reduce the attractiveness of our platform to customers, resulting in decreased sales to new customers, lower renewal rates by existing customers, the issuance of service credits, or requested refunds, which could hurt our revenue growth and our reputation. Even if we are able to upgrade our systems and expand our staff, any such expansion will be expensive and complex, requiring management time and attention. We could also face inefficiencies or operational failures as a result of our efforts to scale our infrastructure. Moreover, there are inherent risks associated with upgrading, improving and expanding our information technology systems. We cannot be sure that the expansion and improvements to our infrastructure and systems will be fully or effectively implemented on a timely basis, if at all. These efforts may reduce revenue and our margins and adversely impact our financial results.

***We are dependent on a single solution, and the lack of continued market acceptance of our platform could cause our operating results to suffer.***

Sales of our Appian software platform account for substantially all of our subscription revenue and are the source of substantially all of our professional services revenue. We expect that we will be substantially dependent on our platform to generate revenue for the foreseeable future. As a result, our operating results could suffer due to:

- any decline in demand for our platform;
- the failure of our platform to achieve continued market acceptance;
- the market for low-code solutions not continuing to grow, or growing more slowly than we expect;
- the introduction of products and technologies that serve as a replacement or substitute for, or represent an improvement over, our platform;
- technological innovations or new standards that our platform does not address;
- sensitivity to current or future prices offered by us or competing solutions; and
- our inability to release enhanced versions of our platform on a timely basis.

If the market for our platform grows more slowly than anticipated or if demand for our platform does not grow as quickly as anticipated, whether as a result of competition, pricing sensitivities, product obsolescence, technological change, unfavorable economic conditions, uncertain geopolitical environment, budgetary constraints of our customers or other factors, we may not be able to grow our revenue.

***If we are unable to further penetrate our existing industry verticals or expand our customer base, our revenue may not grow and our operating results may be harmed.***

Currently, a significant majority of our revenue is derived from companies in the financial services, pharmaceuticals, insurance and healthcare industries, and from the U.S. federal government. We are investing

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substantial resources to expand and train our sales force to enable it to better understand these industry verticals and drive sales to customers in these industry verticals, but there can be no assurance that these investments will be successful. Further, an important part of our strategy is to expand our customer base in a wide variety of industries. We have less experience in some industries and our expansion may require us to grow our expertise in certain areas and add sales and support personnel possessing familiarity with the relevant industries. There may be competitors in these verticals that may be entrenched and difficult to dislodge. As a result of these and other factors, our efforts to expand our customer base may be expensive and may not succeed, and we therefore may be unable to grow our revenue. If we fail to further penetrate our existing industry verticals or expand our customer base, we may be unable to grow our revenue and our operating results may be harmed.

***Market adoption of low-code solutions to drive digital transformation is new and unproven and may not grow as we expect, which may harm our business and prospects.***

We believe our future success will depend in large part on growth in the demand for low-code solutions to drive software-enabled digital transformation. We have customers in a wide variety of industries, including financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation. It is difficult to predict customer demand for our platform, renewal rates, the rate at which existing customers expand their subscriptions, the size and growth rate of the market for our platform, the entry of competitive products or the success of existing competitive products. The utilization of low-code software to drive digital transformation is still relatively new. Any expansion in our addressable market depends on a number of factors, including businesses continuing to desire to differentiate themselves through software-enabled digital transformation, increasing their reliance on low-code solutions, changes in the competitive landscape, technological changes, budgetary constraints of our customers and changes in economic conditions. If our platform does not achieve widespread adoption or there is a reduction in demand for low-code solutions caused by a lack of customer acceptance, technological challenges, competing technologies and products, decreases in corporate or IT infrastructure spending, weakening economic conditions, or other factors, it could result in reduced customer purchases, reduced renewal rates and decreased revenue, any of which will adversely affect our business, operating results and financial condition.

***Our sales cycle is long and unpredictable, particularly with respect to large customers, and our sales efforts require considerable time and expense, all of which may cause our operating results to fluctuate.***

Our operating results may fluctuate, in part, because of the resource-intensive nature of our sales efforts, the length and variability of the sales cycle of our platform and the difficulty that we face in adjusting our short-term operating expenses. Our operating results depend in part on sales to large customers and promotion of increasing usage within those large customers. The length of our sales cycle, from initial evaluation to delivery of, and payment for, the software, varies substantially from customer to customer. Our sales cycle can extend to more than a year for certain large customers. It is difficult to predict if or when we will make a sale to a potential customer. Prospective customers, especially larger organizations, often undertake a prolonged evaluation process, which typically involves not only our platform, but also those of our competitors and can last from four to nine months or longer. We may spend substantial time, effort and money on our sales and marketing efforts without any assurance that our efforts will produce any sales. In addition, events affecting our customers' businesses may occur during the sales cycle that could affect the size or timing of a purchase, contributing to more unpredictability in our business and operating results. As a result of these factors, we may face greater costs, longer sales cycles and less predictability in the future. In the past, certain individual sales have occurred in periods later than we expected or have not occurred at all. The loss or delay of one or more large transactions in a quarter could impact our operating results for that quarter and any future quarters in which such revenue would otherwise have been recognized. As a result of these factors, it is difficult for us to forecast our revenue accurately in any quarter, and our quarterly results may fluctuate substantially. Further, because a substantial portion of our expenses are relatively fixed in the short-term, our operating results will suffer if revenue falls below our expectations in a particular quarter.

***We currently face significant competition.***

The markets for low-code development platforms, business process management, case management software and custom software are highly competitive, rapidly evolving and have relatively low barriers to entry. The principal competitive factors in our market include: platform features, reliability, performance and effectiveness; ease of use and speed; platform extensibility and ability to integrate with other technology infrastructures; deployment flexibility; robustness of professional services and customer support; price and total cost of ownership; strength of platform security and adherence to industry standards and certifications; strength of sales and marketing efforts; and brand awareness and reputation. If we fail to compete effectively with respect to any of these competitive factors, we may fail to attract new customers or lose or fail to renew existing customers, which would cause our operating results to suffer.

We primarily compete with low-code development platforms sold by companies such as salesforce.com, inc. and ServiceNow, Inc. We also compete with companies that provide business process management and case management software, including IBM, OpenText Corporation, Oracle Corporation, Pegasystems Inc. and SAP SE. Further, because our platform is used by our customers to create custom applications, there are software companies that offer commercial, off-the-shelf applications as well as custom software solutions that compete with us. For example, our platform is used by the Defense Information Systems Agency of the U.S. federal government, or DISA, to manage procurement processes and contract writing. Competing vendors offer software that specifically performs contract writing functionality, and we have on occasion lost competitive bids to those point solution vendors for contracts with DISA. In addition, large software and internet companies may seek to enter our primary markets.

Some of our actual and potential competitors have advantages over us, such as longer operating histories, more established relationships with current or potential customers and commercial partners, significantly greater financial, technical, marketing or other resources, stronger brand recognition, larger intellectual property portfolios and broader global distribution and presence. Such competitors may make their solutions available at a low cost or no cost basis in order to enhance their overall relationships with current or potential customers. Our competitors may also be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards or customer requirements. With the introduction of new technologies and new market entrants, we expect competition to intensify in the future. In addition, some of our larger competitors have substantially broader offerings and can bundle competing products with other software offerings. As a result, customers may choose a bundled offering from our competitors, even if individual products have more limited functionality than our platform. These larger competitors are also often in a better position to withstand any significant reduction in capital spending, and will therefore not be as susceptible to economic downturns.

Furthermore, our actual and potential competitors may establish cooperative relationships among themselves or with third parties that may further enhance their resources and offerings in the markets we address. In addition, current or potential competitors may be acquired by third parties with greater available resources. As a result of such relationships and acquisitions, our actual or potential competitors might be able to adapt more quickly to new technologies and customer needs, devote greater resources to the promotion or sale of their products, initiate or withstand substantial price competition, take advantage of other opportunities more readily or develop and expand their offerings more quickly than we do. For all of these reasons, we may not be able to compete successfully against our current or future competitors.

***If our security measures are breached or unauthorized access to our platform or customer data is otherwise obtained, our platform may be perceived as not being secure, customers may reduce the use of or stop using our platform and we may incur significant liabilities.***

Our platform, which can be deployed in the cloud, on-premises or using a hybrid approach, allows for the storage and transmission of our customers' proprietary or confidential information, which may include trade secrets, personally identifiable information, personal health information and payment card information. Any

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actual or perceived unauthorized access to, or security breaches affecting, our platform or the information stored on or transmitted by our platform could result in the loss of information, litigation, regulatory investigations, penalties, indemnity obligations and other costs, expenses and liability, which could exceed our existing insurance coverage and could result in a substantial financial loss. While we have security measures in place designed to protect customer information and prevent data loss and other security breaches, there can be no assurance that these measures will be effective in protecting against unauthorized access to our platform or our customers' information. Similarly, if cyber incidents, such as phishing attacks, viruses, denial of service attacks, malware installation, server malfunction, software or hardware failures, loss of data or other computer assets, adware, or other similar issues, impair the integrity or availability of our systems by affecting our data, or reducing access to or shutting down one or more of our computing systems or our IT network, we may be subject to negative treatment by our customers, our business partners, the press, and the public at large. Further, because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Additionally, we may be subject to attacks on our networks or systems or attempts to gain unauthorized access to our proprietary or confidential information or other data we or our vendors maintain, such as data about our employees. Such attacks and other breaches of security may occur as a result of malicious attacks, human error, social engineering, or other causes. Any actual or perceived breach of our security measures or failure to adequately protect our customers' or our confidential or proprietary information could negatively affect our ability to attract new customers, cause existing customers to elect to not renew their subscriptions to our software or result in reputational damage, any of which could adversely affect our operating results.

Further, security compromises experienced by our customers with respect to data hosted on our platform, even if caused by the customer's own misuse or negligence, may lead to public disclosures, which could harm our reputation, erode customer confidence in the effectiveness of our security measures, negatively impact our ability to attract new customers, or cause existing customers to elect not to renew their subscriptions with us. We may be subjected to indemnity demands, regulatory proceedings, audits, penalties or litigation based on our customers' misuse of our platform with respect to such sensitive information, and defending against such litigation and otherwise addressing such matters may be expensive, cause distraction, and may result in us incurring liability, all of which may affect our operating results.

While we maintain general liability insurance coverage and coverage for errors or omissions, we cannot assure you that such coverage will be adequate or otherwise protect us from liabilities or damages with respect to claims alleging compromises of personal data or that such coverage will continue to be available on acceptable terms or at all.

***We previously identified a material weakness in our internal control over financial reporting, and if we are unable to achieve and maintain effective internal control over financial reporting, this could have a material adverse effect on our business.***

We produce our consolidated financial statements in accordance with the requirements of U.S. GAAP. Effective internal controls are necessary for us to provide reliable financial reports to help mitigate the risk of fraud and to operate as a publicly traded company. Prior to our initial public offering, or IPO, we were a private company with limited accounting personnel and other resources with which to address our internal controls and procedures. Our independent registered public accounting firm identified a material weakness and a significant deficiency in our internal controls over financial reporting in connection with the audit of our financial statements for the year ended December 31, 2015. A "material weakness" is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. A "significant deficiency" is a deficiency or a combination of deficiencies in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those responsible for oversight of our financial reporting.

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The material weakness that our independent registered public accounting firm identified related to our revenue recognition related to certain multiple element arrangements in which the controls over the review of transactions that included fixed fee professional services sold with term or perpetual license agreements failed to ensure the resulting revenue recognition was consistent with applicable guidance. This material weakness resulted in the restatement of our 2013 and 2014 financial statements, with approximately \$2.4 million in revenue previously recognized in 2013 being deferred until 2014 and beyond and \$1.9 million in revenue previously recognized in 2014 being deferred until 2015 and beyond. In addition, the significant deficiency involved lack of oversight to system administrative rights granted to non-IT personnel to our financial reporting systems. We have taken steps to remediate the material weakness and significant deficiency, including hiring additional accounting staff members that are proficient in revenue recognition accounting, including a manager of revenue recognition and an assistant controller, consulting with outside professional accountants on revenue recognition issues, adding internal controls related to revenue recognition and limiting administrative access rights to our financial reporting systems. We believe that as of December 31, 2016, this previous material weakness and significant deficiency were fully remediated. In connection with the audit of our 2016 financial statements, no material weaknesses were identified in our internal control over financial reporting, although one significant deficiency was identified relating to personnel access rights to key accounting spreadsheets.

As a public company, we are required to design, document and test our internal controls over financial reporting to comply with Sarbanes-Oxley Act Section 404. We cannot be certain that additional material weaknesses and control deficiencies will not be discovered in the future. If material weaknesses or control deficiencies occur in the future, we may be unable to report our financial results accurately on a timely basis or help prevent fraud, which could cause our reported financial results to be materially misstated and result in the loss of investor confidence or delisting and cause the market price of our Class A common stock to decline. If we have material weaknesses in the future, it could affect the financial results that we report or create a perception that those financial results do not fairly state our financial position or results of operations. Either of those events could have an adverse effect on the value of our Class A common stock.

Further, even if we conclude that our internal control over financial reporting provides reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. GAAP, because of its inherent limitations, internal control over financial reporting may not prevent or detect fraud or misstatements. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our results of operations or cause us to fail to meet our future reporting obligations.

***We derive a material portion of our revenue from a limited number of customers, and the loss of one or more of these customers could adversely impact our business, results of operations and financial condition.***

Our customer base is concentrated. For example, during the years ended December 31, 2014, 2015 and 2016, revenue from U.S. federal government agencies represented 34%, 33% and 26% of our total revenue, respectively, and the top three U.S. federal government customers generated 23%, 21% and 18% of our total revenue for the years ended December 31, 2014, 2015 and 2016, respectively. Further, nearly 10% of our subscription customers spent more than \$1 million on our software in 2016. If we were to lose one or more of our significant customers, our revenue may significantly decline. In addition, revenue from significant customers may vary from period to period depending on the timing of renewing existing agreements or entering into new agreements. The loss of one or more of our significant customers could adversely affect our business, results of operations and financial condition.

In addition, due to our dependence on a limited number of customers, we face a concentration of credit risk. As of September 30, 2017, one customer accounted for 9.1% of our accounts receivable. In the case of insolvency by one of our significant customers, accounts receivable with respect to that customer might not be collectible, might not be fully collectible, or might be collectible over longer than normal terms, each of which could adversely affect our financial condition.

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***A portion of our revenue is generated from subscriptions sold to governmental entities and heavily regulated organizations, which are subject to a number of challenges and risks.***

A significant portion of our revenue is generated from subscriptions sold to governmental entities, both in the United States and internationally. Additionally, many of our current and prospective customers, such as those in the financial services, pharmaceuticals, insurance and healthcare industries, are highly regulated and may be required to comply with more stringent regulations in connection with subscribing to and implementing our platform. Selling subscriptions to these entities can be highly competitive, expensive and time-consuming, often requiring significant upfront time and expense without any assurance that we will successfully complete a sale. Governmental demand and payment for our platform may also be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our platform.

Further, governmental and highly regulated entities often require contract terms that differ from our standard arrangements, including terms that can lead to those customers obtaining broader rights in our products than would be standard. Governmental and highly regulated entities, including the General Services Administration, whose schedule accounts for many of our U.S. federal government contracts, impose compliance requirements that are complicated, require preferential pricing or “most favored nation” terms and conditions or are otherwise time-consuming and expensive to satisfy. In the United States, applicable federal contracting regulations change frequently, and the President may issue executive orders requiring federal contractors to adhere to new compliance requirements after a contract is signed. If we undertake to meet special standards or requirements and do not meet them, we could be subject to significant liability from our customers or regulators. Even if we do meet these special standards or requirements, the additional costs associated with providing our platform to government and highly regulated customers could harm our operating results. Moreover, changes in the underlying statutory and regulatory conditions that affect these types of customers could harm our ability to efficiently provide them access to our platform and to grow or maintain our customer base. In addition, engaging in sales activities to foreign governments introduces additional compliance risks specific to the Foreign Corrupt Practices Act, the U.K. Bribery Act and other similar statutory requirements prohibiting bribery and corruption in the jurisdictions in which we operate.

***We have experienced losses in the past, and we may not achieve or sustain profitability in the future.***

We generated net losses of \$17.1 million, \$7.0 million and \$12.5 million in 2014, 2015 and 2016, respectively, and a net loss of \$24.1 million in the nine months ended September 30, 2017. As of September 30, 2017, we had an accumulated deficit of \$89.3 million. We will need to generate and sustain increased revenue levels in future periods in order to achieve or sustain profitability in the future. We also expect our costs to increase in future periods, which could negatively affect our future operating results if our revenue does not increase commensurately. For example, we intend to continue to expend significant funds to expand our sales and marketing operations, develop and enhance our platform, meet the increased compliance requirements associated with operation as a public company, and expand into new markets. Our efforts to grow our business may be more costly than we expect, and we may not be able to increase our revenue enough to offset our higher operating expenses. We may incur significant losses in the future for a number of reasons, including the other risks described in this prospectus, and unforeseen expenses, difficulties, complications and delays and other unknown events. If we are unable to achieve and sustain profitability, our stock price may significantly decrease.

***Our future quarterly results of operations may fluctuate significantly due to a wide range of factors, which makes our future results difficult to predict.***

Our revenue and results of operations have historically varied from period to period, and we expect that they will continue to do so as a result of a number of factors, many of which are outside of our control, including:

- the level of demand for our platform and our professional services;

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- the rate of renewal of subscriptions with, and extent of sales of additional subscriptions to, existing customers;
- large customers failing to renew their subscriptions;
- the size, timing and terms of our subscription agreements with existing and new customers;
- the timing and growth of our business, in particular through our hiring of new employees and international expansion;
- the timing of our adoption of new or revised accounting pronouncements applicable to public companies and the impact on our results of operations;
- the introduction of new products and product enhancements by existing competitors or new entrants into our market, and changes in pricing for solutions offered by us or our competitors;
- network outages, security breaches, technical difficulties or interruptions with our platform;
- changes in the growth rate of the markets in which we compete;
- the mix of subscriptions to our platform and professional services sold during a period;
- customers delaying purchasing decisions in anticipation of new developments or enhancements by us or our competitors or otherwise;
- changes in customers' budgets;
- seasonal variations related to sales and marketing and other activities, such as expenses related to our customers;
- our ability to increase, retain and incentivize the strategic partners that market and sell our platform;
- our ability to control costs, including our operating expenses;
- our ability to hire, train and maintain our direct sales force;
- unforeseen litigation and intellectual property infringement;
- fluctuations in our effective tax rate; and
- general economic and political conditions, both domestically and internationally, as well as economic conditions specifically affecting industries in which our customers operate.

Any one of these or other factors discussed elsewhere in this prospectus or the cumulative effect of some of these factors may result in fluctuations in our revenue and operating results, meaning that quarter-to-quarter comparisons of our revenue, results of operations and cash flows may not necessarily be indicative of our future performance and may cause us to miss our guidance and analyst expectations and may cause our stock price to decline.

In addition, we have historically experienced seasonality in terms of when we enter into agreements with customers. We typically enter into a significantly higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in the fourth quarter and, to a lesser extent, the second quarter. The increase in customer agreements for the fourth quarter is attributable to large enterprise account buying patterns typical in the software industry. Furthermore, we usually enter into a significant portion of agreements with customers during the last month, and often the last two weeks, of each quarter. This seasonality is reflected to a much lesser extent, and sometimes is not immediately apparent, in revenue, due to the fact that we recognize subscription revenue over the term of the subscription agreement, which is generally one to five years. We expect that seasonality will continue to affect our operating results in the future and may reduce our ability to predict cash flow and optimize the timing of our operating expenses.



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### ***We may not be able to continue to shift our revenue towards subscriptions and away from professional services.***

Currently, our revenue is nearly evenly divided between subscriptions and professional services revenue. Since 2014, the proportion of our revenue attributable to subscriptions has increased as a proportion of our total revenue. That shift in revenue towards subscriptions has resulted in an increase of our overall gross profit, because our marginal costs in delivering our subscriptions are lower than the marginal costs of delivering professional services. Our strategic focus has been to grow subscriptions revenue faster than professional services revenue to perpetuate this trend.

There can be no guarantee that our revenue will continue to shift towards subscriptions, and away from professional services. Our customers may demand more professional services from us, or demand for our subscriptions may grow slower than demand for our professional services. Should we fail to continue to shift our revenue towards subscriptions our earnings may suffer and our stock price may decline.

### ***If we do not continue to innovate and provide a platform that is useful to our customers, we may not remain competitive, and our revenue and operating results could suffer.***

Our success depends on continued innovation to provide features that make our platform useful for our customers. We must continue to invest significant resources in research and development in order to continually improve the simplicity and power of our platform. We may introduce significant changes to our platform or develop and introduce new and unproven products, including using technologies with which we have little or no prior development or operating experience. If we are unable to continue offering innovative solutions or if new or enhanced solutions fail to engage our customers, we may be unable to attract additional customers or retain our current customers, which may adversely affect our business, operating results and financial condition.

### ***We may need to reduce or change our pricing model to remain competitive.***

We generally sell our software on a per-user basis. We expect that we may need to change our pricing from time to time. As competitors introduce new products that compete with ours or reduce their prices, we may be unable to attract new customers or retain existing customers based on our historical pricing. We also must determine the appropriate price to enable us to compete effectively internationally. Moreover, mid- to large-size enterprises may demand substantial price discounts as part of the negotiation of sales contracts. As a result, we may be required or choose to reduce our prices or change our pricing model, which could adversely affect our business, operating results and financial condition.

### ***Defects or disruptions in the rollout of our platform updates or enhancements could diminish demand for our platform, adversely affect our reputation and subject us to substantial liability.***

Like many software companies, we provide frequent incremental releases of software updates and functional enhancements to our platform. Despite extensive pre-release testing, such new versions occasionally contain undetected errors when first introduced or released. We have, from time to time, found errors in our software, and new errors in our existing software may be detected in the future. Since our customers use our software for important aspects of their business, any errors, defects, disruptions in our platform or other performance problems with our solution could hurt our reputation and may damage our customers' businesses. If that occurs, our customers may delay or withhold payment to us, elect not to renew, make service credit claims, warranty claims or other claims against us, and we could lose future sales. The occurrence of any of these events could result in an increase in our bad debt expense, an increase in collection cycles for accounts receivable, decreased future revenue and earnings, require us to increase our warranty provisions or incur the risk or expense of litigation.

***If the estimates and assumptions we have used to calculate the size of our target market are inaccurate, our future growth rate may be limited.***

We have estimated the size and potential growth of our target market based on data published by third parties and on internally generated data and assumptions. We have not independently verified any third-party information and cannot assure you of its accuracy or completeness. While we believe our market size and growth information is generally reliable, such information is inherently imprecise. In addition, our projections, assumptions and estimates of future opportunities within our target market are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in this prospectus. If third-party or internally generated data prove to be inaccurate or we make errors in our assumptions based on that data, our future growth rate may be limited. In addition, these inaccuracies or errors may cause us to misallocate capital and other business resources, which could harm our business.

Even if our target market meets our size estimates and experiences the forecasted growth, we may not grow our business at similar rates, or at all. Our growth is subject to many factors, including our success in implementing our business strategy, which is subject to many risks and uncertainties. Accordingly, the forecasts of market growth included in this prospectus should not be taken as indicative of our future growth.

***If governments or their agencies reduce their demand for our platform, our business may suffer. Moreover, if we fail to comply with government contracting regulations, we could suffer a loss of revenue or incur price adjustments or other penalties.***

Changes in governmental budget priorities could adversely affect our business. U.S. and foreign government agencies have purchased our platform directly from us and products from our customers. When the government changes budget priorities, such as in times of war or financial crisis or as a result of election cycles, our subscription sales to government agencies and government-funded customers are at risk. Demand and payment for our subscriptions and our customers' products may be affected by public sector budgetary cycles or funding authorizations. Funding reductions or delays could negatively impact demand for our platform. If government funding is discontinued or significantly reduced, our business could be materially adversely affected. For example, one of our largest customers is a government agency responsible for implementing a portion of the Affordable Care Act, or ACA. If funding for ACA implementation is curtailed or terminated, the agency may not renew its annual subscription with us, which could adversely affect our operating results.

Some of our revenue is derived from contracts with agencies of the U.S. government and subcontracts with its prime contractors. As a result, we are subject to federal contracting regulations, including the Federal Acquisition Regulation, or the FAR, system. The FAR system governs, among other things, U.S. government contract pricing, including determination of the costs incurred by us in the performance of our U.S. government contracts. Under the FAR system, certain contract pricing is based on estimated direct and indirect costs, which are subject to change. Additionally, under the FAR system, the U.S. government is entitled, for years after final payment on certain negotiated contracts, to examine all of our cost records with respect to such contracts and to seek a downward adjustment to the price of the contract if it determines that we failed to furnish complete, accurate and current cost or pricing data in connection with the negotiation of the price of the contract.

In connection with our U.S. government contracts, we are also subject to government audits and review and approval of our policies, procedures and internal controls for compliance with contract terms, procurement regulations and applicable laws. In certain circumstances, if we do not comply with the terms of a contract or with regulations or statutes, we could be subject to contract termination or downward contract price adjustments or refund obligations, could be assessed civil or criminal penalties or could be debarred or suspended from obtaining future contracts for a specified period of time. Any such termination, adjustment, sanction, debarment or suspension could have an adverse effect on our business.

***Our business could be adversely affected if our customers are not satisfied with the deployment services provided by us or our partners.***

The success of our business depends on our customers' satisfaction with our platform, the support that we provide for our platform and the professional services that we provide to help our customers deploy our platform. Professional services may be performed by our own staff, by a third party or by a combination of the two. Our strategy is to work with third parties to increase the breadth, capability and depth of capacity for delivery of these services to our customers, and third parties provide a significant portion of our deployment services. If a customer is not satisfied with the quality of work performed by us or a third party or with the type of applications delivered, we could incur additional costs to address the deficiency, which would diminish the profitability of the customer relationship. Further, a customer's dissatisfaction with our services could impair our ability to expand the number of licenses to our software purchased by that customer or adversely affect the customer's renewal of existing licenses. In addition, negative publicity related to our customer relationships, regardless of accuracy, may further damage our business by affecting our ability to compete for new business with actual and prospective customers.

***If customers do not expand their use of our platform beyond initial use cases and applications, our ability to grow our business and our operating results may be adversely affected.***

Our ability to grow our business depends, in part, on our ability to persuade existing customers to expand their use of our platform to additional use cases and additional applications, and to purchase additional software licenses to our platform. Our goal is for customer satisfaction with initial applications developed on our platform to drive increased sales of licenses to our platform. However, if customers are not satisfied with their initial experience using our platform, they may choose not to renew licenses upon expiration or purchase additional software licenses, which would adversely affect our operating results.

***We are substantially dependent upon customer renewals, the addition of new customers and the continued growth of our subscription revenue.***

We derive, and expect to increasingly derive in the future, a substantial portion of our revenue from the sale of software subscriptions. For 2014, 2015, 2016 and the nine months ended September 30, 2017, approximately 42%, 48%, 53% and 52%, respectively, of our total revenue was subscriptions, software and support revenue. The market for our platform is still evolving, and competitive dynamics may cause pricing levels to change as the market matures and as existing and new market participants introduce new types of solutions and different approaches to enable customers to address their needs. As a result, we may be forced to reduce the prices we charge for software and may be required to offer terms less favorable to us for new and renewing agreements.

In order for us to improve our operating results, it is important that our customers renew their subscriptions with us when their initial term expires, as well as purchase additional subscriptions from us. In general, our customers have no renewal obligation after their initial term expires, and we cannot assure you that we will be able to renew subscriptions with any of our customers at the same or higher contract value.

Further, while we offer access to our platform primarily through multi-year subscription agreements, some agreements may have shorter durations. Additionally, some of our contracts limit the amount we can increase prices from period to period, or include pricing guarantees. If our customers do not renew their agreements, terminate their agreements, renew their agreements on terms less favorable to us or fail to purchase additional software subscriptions, our revenue may decline and our operating results would likely be harmed as a result.

***We rely on the performance of highly skilled personnel, including senior management and our engineering, professional services, sales and technology professionals; if we are unable to retain or motivate key personnel or hire, retain and motivate qualified personnel, our business would be harmed.***

We believe our success has depended, and continues to depend, on the efforts and talents of our senior management team, particularly Matthew Calkins, our founder and Chief Executive Officer, and our highly skilled

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team members, including our sales personnel, professional services personnel and software engineers. We do not maintain key man insurance on any of our executive officers or key employees other than Mr. Calkins. From time to time, there may be changes in our senior management team resulting from the termination or departure of our executive officers and key employees. Our senior management and key employees are employed on an at-will basis, which means that they could terminate their employment with us at any time. The loss of any of our senior management or key employees, particularly Mr. Calkins, could adversely affect our ability to build on the efforts they have undertaken and to execute our business plan, and we may not be able to find adequate replacements. We cannot ensure that we will be able to retain the services of any members of our senior management or other key employees.

Our ability to successfully pursue our growth strategy also depends on our ability to attract, motivate and retain our personnel. Competition for well-qualified employees in all aspects of our business, including sales personnel, professional services personnel and software engineers, is intense. Our recruiting efforts focus on elite universities and our primary recruiting competition are well-known, high-paying firms. Our continued ability to compete effectively depends on our ability to attract new employees and to retain and motivate existing employees. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business would be adversely affected.

***Failure to effectively develop and expand our sales and marketing capabilities could harm our ability to increase our customer base and achieve broader market acceptance of our solution.***

Our ability to increase our customer base and achieve broader market acceptance of our platform will depend to a significant extent on our ability to expand our sales and marketing operations. We plan to continue expanding our sales force and third-party strategic sales partners, both domestically and internationally; however, there is no assurance that we will be successful in attracting and retaining talented sales personnel or strategic partners or that any new sales personnel or strategic partners will be able to achieve productivity in a reasonable period of time or at all. We also plan to dedicate significant resources to sales and marketing programs, including through electronic marketing campaigns and trade event sponsorship and participation. All of these efforts will require us to invest significant financial and other resources and our business will be harmed if our efforts do not generate a correspondingly significant increase in revenue.

***If we are not able to maintain and enhance our brand, our business and operating results may be adversely affected.***

We believe that developing and maintaining widespread awareness of our brand in a cost-effective manner is critical to achieving widespread acceptance of our platform and attracting new customers. Brand promotion activities may not generate customer awareness or increase revenue and, even if they do, any increase in revenue may not offset the expenses we incur in building our brand. If we fail to successfully promote and maintain our brand, or incur substantial expenses, we may fail to attract or retain customers necessary to realize a sufficient return on our brand-building efforts, or to achieve the widespread brand awareness that is critical for broad customer adoption of our platform.

***Our services revenue is highly dependent on selling software to new and existing customers.***

We derive a majority of our services revenue from professional services that relate to the development and delivery of new applications using our platform, after a customer has made an initial or additional software purchase. Accordingly, our failure to sell software may have a collateral adverse impact on our services revenue and our overall operational results.

***Because we generally recognize revenue from subscriptions ratably over the term of a license agreement, near term changes in sales may not be reflected immediately in our operating results.***

We offer our solution primarily through multi-year subscription agreements and generally recognize revenue ratably over the related license period. As a result, much of the revenue that we report in each quarter is

derived from the recognition of previously unbilled contract value relating to agreements entered into during prior periods. In addition, because we invoice the majority of customers for not more than the next fiscal year, including customers with multi-year agreements, we do not record deferred revenue beyond amounts invoiced as a liability on our balance sheet. Accordingly, a decline in new or renewal subscription agreements in any quarter is not likely to be reflected immediately in our revenue results for that quarter. Such declines, however, would negatively affect our revenue and to a lesser extent deferred revenue balance in future periods, and the effect of significant downturns in sales and market acceptance of our platform, and potential changes in our rate of renewals, may not be fully reflected in our results of operations until future periods. Our subscription model also makes it difficult for us to rapidly increase our total revenue and deferred revenue balance through additional sales in any period, as revenue from new customers must be recognized over the applicable subscription term.

***We rely upon Amazon Web Services to operate our cloud offering; any disruption of or interference with our use of Amazon Web Services would adversely affect our business, results of operations and financial condition.***

We outsource substantially all of the infrastructure relating to our cloud offering to Amazon Web Services, or AWS, which hosts our platform on our customers' behalf. Customers of our cloud offering need to be able to access our platform at any time, without interruption or degradation of performance, and we provide them with service level commitments with respect to uptime. AWS runs its own platform that we access, and we are, therefore, vulnerable to service interruptions at AWS. We may experience interruptions, delays and outages in service and availability from time to time as a result of problems with our AWS provided infrastructure. For example, in September 2015, AWS suffered a significant outage that had a widespread impact on cloud-based software and services companies. Although our customers were not affected by that outage, a similar outage could render our cloud offering inaccessible to customers. Additionally, AWS has suffered outages at specific customer locations in the past, rendering the customer unable to access our offering for periods of time. Lack of availability of our AWS infrastructure could be due to a number of potential causes including technical failures, natural disasters, fraud or security attacks that we cannot predict or prevent. Such outages could lead to the triggering of our service level agreements and the issuance of credits to our cloud offering customers, which may impact our operating results.

In addition, if the security of the AWS infrastructure is compromised or believed to have been compromised, our business, results of operations and financial condition could be adversely affected. It is possible that our customers and potential customers would hold us accountable for any breach of security affecting the AWS infrastructure and we may incur significant liability from those customers and from third parties with respect to any breach affecting AWS systems. Because our agreement with AWS limits AWS's liability for damages, we may not be able to recover a material portion of our liabilities to our customers and third parties from AWS. Customers and potential customers may refuse to do business with us because of the perceived or actual failure of our cloud offering as hosted by AWS and our operating results could be harmed.

Our agreement with AWS allows AWS to terminate the agreement by providing two years' prior written notice, and may allow AWS to terminate in case of a breach of contract if such breach is uncured for 30 days, or to terminate upon thirty days' advance written notice if AWS's further provision of services to us becomes impractical for legal or regulatory reasons. Although we expect that we could receive similar services from other third parties, if any of our arrangements with AWS are terminated, we could experience interruptions on our platform and in our ability to make our platform available to customers, as well as delays and additional expenses in arranging alternative cloud infrastructure services.

***If our platform fails to perform properly, our reputation could be adversely affected, our market share could decline and we could be subject to liability claims.***

Our platform is inherently complex and may contain material defects or errors. Any defects in functionality or that cause interruptions in the availability of our platform could result in:

- loss or delayed market acceptance and sales;

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- breach of warranty claims;
- sales credits or refunds for prepaid amounts related to unused subscription services;
- loss of customers;
- diversion of development and support resources; and/or
- injury to our reputation.

The costs incurred in correcting any material defects or errors might be substantial and could adversely affect our operating results.

Our customer agreements often provide service level commitments on a monthly basis. If we are unable to meet the stated service level commitments or suffer extended periods of unavailability for our platform, we may be contractually obligated to provide these customers with service credits, refunds for prepaid amounts or we could face contract terminations. Our revenue could be significantly affected if we suffer unscheduled downtime that exceeds the allowed downtimes under our agreements with our customers.

Because of the large amount of data that we collect and manage, it is possible that hardware failures or errors in our systems could result in data loss or corruption, or cause the information that we collect to be incomplete or contain inaccuracies that our customers regard as significant. Furthermore, the availability or performance of our platform could be adversely affected by a number of factors, including customers' inability to access the internet, the failure of our network or software systems, security breaches or variability in user traffic for our services. For example, our cloud offering customers access our platform through their internet service providers. If a customer's service provider fails to provide sufficient capacity to support our platform or otherwise experiences service outages, such failure could interrupt our customers' access to our platform, adversely affect their perception of our platform's reliability and reduce our revenue. In addition to potential liability, if we experience interruptions in the availability of our cloud offering, our reputation could be adversely affected and we could lose customers.

### ***If we fail to offer high-quality support, our business and reputation would suffer.***

Our customers rely on our personnel for support of our platform. High-quality support is important for the renewal of our agreements with existing customers and to our existing customers purchasing additional software. The importance of high-quality support will increase as we expand our business and pursue new customers. If we do not help our customers quickly resolve issues and provide effective ongoing support, our ability to sell new software to existing and new customers would suffer and our reputation with existing or potential customers would be harmed.

### ***Our strategy of offering and deploying our platform in the cloud, on-premises or using a hybrid approach causes us to incur increased expenses and may pose challenges to our business.***

We offer and sell our platform in the cloud, on-premises or using a hybrid approach using the customer's own infrastructure. Our cloud offering enables our customers to eliminate the burden of provisioning and maintaining infrastructure and to scale their usage of our software platform quickly, while our on-premises offering allows for the customer's complete control over data security and software infrastructure. Historically, our platform was developed in the context of the on-premises offering, and we have less operating experience offering and selling subscriptions to our platform via our cloud offering. Although a substantial majority of our revenue has historically been generated from customers using our platform on an on-premises basis, our customers are increasingly adopting our cloud offering. We expect that our customers will continue to move to our cloud offering and that it will become more central to our distribution model. To support both on-premises and cloud instances of our platform, our support team must be trained on and learn multiple environments in which our software is deployed, which is more expensive than supporting only a cloud offering. Moreover, we

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must engineer our software for both an on-premises and cloud offering installation, which may cause us additional research and development expense that may impact our operating results. As more of our customers transition to the cloud, we may be subject to additional competitive pressures, which may harm our business. We are directing a significant portion of our financial and operating resources to implement a robust and secure cloud offering for our platform, but even if we continue to make these investments, we may be unsuccessful in growing or implementing our cloud offering in a way that competes successfully against our current and future competitors and our business, results of operations and financial condition could be harmed.

***As a result of our customers' increased usage of our cloud offering, we will need to continually improve our computer network and infrastructure to avoid service interruptions or slower system performance.***

As usage of our cloud offering grows and as customers use it for more complicated applications and with increased data requirements, we will need to devote additional resources to improving our platform architecture and our infrastructure in order to maintain the performance of our cloud offering. Any failure or delays in our computer systems could cause service interruptions or slower system performance. If sustained or repeated, these performance issues could reduce the attractiveness of our platform to customers. These performance issues could result in lost customer opportunities and lower renewal rates, any of which could hurt our revenue growth, customer loyalty and reputation.

***If we cannot maintain our corporate culture as we grow, we could lose the innovation, teamwork, passion and focus on execution that we believe contribute to our success, and our business may be harmed.***

We believe that a critical component to our success has been our corporate culture. We have invested substantial time and resources in building our team and maintaining that corporate culture through the growth of our company. As we grow and develop the infrastructure of a public company, we may find it difficult to maintain important aspects of our corporate culture. Any failure to preserve our culture could negatively affect our future success, including our ability to retain and recruit personnel and to effectively focus on and pursue our corporate objectives.

***Because our long-term growth strategy involves further expansion of our sales to customers outside the United States, our business will be susceptible to risks associated with international operations.***

A component of our growth strategy involves the further expansion of our operations and customer base internationally. In 2014, 2015 and 2016, revenue generated from customers outside the United States was 26%, 20% and 20%, respectively, of our total revenue. We currently have international offices in the United Kingdom, continental Europe and Australia, which focus primarily on selling and implementing our platform in those regions. In the future, we may expand to other international locations. Our current international operations and future initiatives will involve a variety of risks, including:

- changes in a specific country's or region's political or economic conditions;
- unexpected changes in regulatory requirements, taxes or trade laws;
- more stringent regulations relating to data security and the unauthorized use of, or access to, commercial and personal information, particularly in the European Union;
- differing labor regulations, especially in the European Union, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations;
- challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits and compliance programs;
- difficulties in managing a business in new markets with diverse cultures, languages, customs, legal systems, alternative dispute systems and regulatory systems;

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- increased travel, real estate, infrastructure and legal compliance costs associated with international operations;
- currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we choose to do so in the future;
- limitations on our ability to reinvest earnings from operations in one country to fund the capital needs of our operations in other countries;
- laws and business practices favoring local competitors or general preferences for local vendors;
- limited or insufficient intellectual property protection;
- political instability or terrorist activities;
- exposure to liabilities under anti-corruption and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act and similar laws and regulations in other jurisdictions; and
- adverse tax burdens and foreign exchange controls that could make it difficult to repatriate earnings and cash.

Our limited experience in operating our business internationally increases the risk that any potential future expansion efforts that we may undertake will not be successful. If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business and operating results will suffer.

### ***Our growth depends in part on the success of our strategic relationships with third parties.***

In order to grow our business, we anticipate that we will continue to depend on relationships with strategic partners to provide broader customer coverage and solution delivery capabilities. Identifying partners, and negotiating and documenting relationships with them, requires significant time and resources. Our agreements with our strategic partners are non-exclusive and do not prohibit them from working with our competitors or offering competing solutions. Our competitors may be effective in providing incentives to third parties to favor their products or services or to prevent or reduce subscriptions to our services. If our partners choose to place greater emphasis on products of their own or those offered by our competitors or do not effectively market and sell our platform, our ability to grow our business and sell software and professional services may be adversely affected. In addition, acquisitions of our partners by our competitors could result in a decrease in the number of our current and potential customers, as our partners may no longer facilitate the adoption of our platform by potential customers.

If we are unsuccessful in establishing or maintaining our relationships with third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results may suffer. Even if we are successful, we cannot assure you that these relationships will result in increased customer usage of our platform or increased revenue.

### ***If currency exchange rates fluctuate substantially in the future, our financial results, which are reported in U.S. dollars, could be adversely affected.***

Generally, contracts executed by our foreign operations are denominated in the currency of that country or region and a portion of our revenue is therefore subject to foreign currency risks. As we continue to expand our international operations, we become more exposed to the effects of fluctuations in currency exchange rates. A strengthening of the U.S. dollar could increase the real cost of our platform to our customers outside of the United States, adversely affecting our business operations and financial results. We incur expenses for employee compensation and other operating expenses at our non-U.S. locations in the local currency, and fluctuations in the exchange rates between the U.S. dollar and other currencies could result in the dollar equivalent of such



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expenses being higher. This could have a negative impact on our reported operating results. To date, we have not engaged in any hedging strategies, and any such strategies, such as forward contracts, options and foreign exchange swaps related to transaction exposures that we may implement to mitigate this risk may not eliminate our exposure to foreign exchange fluctuations.

### ***Future acquisitions could disrupt our business and adversely affect our business operations and financial results.***

Although we have not done so in the past, we may choose to expand by acquiring businesses or technologies. Our ability as an organization to successfully acquire and integrate technologies or businesses is unproven. Acquisitions involve many risks, including the following:

- an acquisition may negatively affect our financial results because it may require us to incur charges or assume substantial debt or other liabilities, may cause adverse tax consequences or unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims and disputes, or may not generate sufficient financial return to offset additional costs and expenses related to the acquisition;
- we may encounter difficulties or unforeseen expenditures in integrating the business, technologies, products, personnel or operations of any company that we acquire, particularly if key personnel of the acquired company decide not to work for us;
- an acquisition may disrupt our ongoing business, divert resources, increase our expenses and distract our management;
- an acquisition may result in a delay or reduction of customer purchases for both us and the company acquired due to customer uncertainty about continuity and effectiveness of service from either company;
- we may encounter difficulties in, or may be unable to, successfully sell any acquired solutions;
- an acquisition may involve the entry into geographic or business markets in which we have little or no prior experience or where competitors have stronger market positions;
- our use of cash to pay for an acquisition would limit other potential uses for our cash; and
- if we incur debt to fund such acquisition, such debt may subject us to material restrictions on our ability to conduct our business as well as financial maintenance covenants.

The occurrence of any of these risks could have a material adverse effect on our business operations and financial results. In addition, we may only be able to conduct limited due diligence on an acquired company's operations. Following an acquisition, we may be subject to unforeseen liabilities arising from an acquired company's past or present operations and these liabilities may be greater than the warranty and indemnity limitations that we negotiate. Any unforeseen liability that is greater than these warranty and indemnity limitations could have a negative impact on our financial condition.

### ***We may require additional capital to support business growth, and this capital might not be available on acceptable terms, if at all.***

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new features or enhance our platform, improve our operating infrastructure or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences and privileges superior to those of holders of our Class A common stock. Our loan and security agreement with Silicon Valley Bank for our current line of credit includes restrictive covenants relating to our capital raising activities and other financial and operational

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matters, which may make it more difficult for us to obtain additional capital and to pursue business opportunities, including potential acquisitions, and any debt financing that we secure in the future could have similar restrictive covenants. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be adversely affected.

***We employ third-party licensed software for use in or with our software, and the inability to maintain these licenses or errors in the software we license could result in increased costs, or reduced service levels, which would adversely affect our business.***

Our software incorporates certain third-party software obtained under licenses from other companies, including database software from Kx Systems, Inc. We anticipate that we will continue to rely on such third-party software and development tools from third parties in the future. Although we believe that there are commercially reasonable alternatives to the third-party software we currently license, including open source software, this may not always be the case, or it may be difficult or costly to migrate to other third-party software. Our use of additional or alternative third-party software would require us to enter into license agreements with third parties. In addition, integration of the third-party software used in our software with new third-party software may require significant work and require substantial investment of our time and resources. Also, any undetected errors or defects in third-party software could prevent the deployment or impair the functionality of our software, delay new updates or enhancements to our platform, result in a failure of our platform and injure our reputation.

***If we do not or cannot maintain the compatibility of our platform with third-party applications that our customers use in their businesses, our revenue will decline.***

The functionality and attractiveness of our platform depends, in part, on our ability to integrate our platform with third-party applications and platforms, including customer relationship management, human resources information, accounting and enterprise resource planning systems that our customers use and from which they obtain data. Third-party providers of applications and application program interfaces, or APIs, may change the features of their applications and platforms, restrict our access to their applications and platforms or alter the terms governing use of their applications and APIs and access to those applications and platforms in an adverse manner. Such changes could functionally limit or terminate our ability to use these third-party applications and platforms in conjunction with our platform, which could negatively impact our offerings and harm our business. If we fail to integrate our software with new third-party applications and platforms that our customers use, we may not be able to offer the functionality that our customers need, which would negatively impact our ability to generate revenue and adversely impact our business.

***Portions of our platform utilize open source software, and any failure to comply with the terms of one or more of these open source licenses could negatively affect our business.***

Our software contains software licensed to us by third parties under so-called “open source” licenses, including the GNU Lesser General Public License, the BSD License, the Apache License and others. From time to time, there have been claims against companies that distribute or use open source software in their products and services, asserting that such open source software infringes the claimants’ intellectual property rights. We could be subject to suits by parties claiming that what we believe to be licensed open source software infringes their intellectual property rights. Use and distribution of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, certain open source licenses require that source code for software programs that are subject to the license be made available to the public and that any modifications or derivative works to such open source software continue to be licensed under the same terms.

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Although we monitor our use of open source software in an effort both to comply with the terms of the applicable open source licenses and to avoid subjecting our software to conditions we do not intend, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our platform. By the terms of certain open source licenses, we could be required to release the source code of our software and to make our software available under open source licenses, if we combine or distribute our software with open source software in a certain manner. In the event that portions of our software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all, or a portion of, that software or otherwise be limited in the licensing of our software, each of which could reduce or eliminate the value of our platform. Many of the risks associated with usage of open source software cannot be eliminated, and could negatively affect our business, results of operations and financial condition.

### ***Catastrophic events may disrupt our business.***

Our corporate headquarters are located in Reston, Virginia. The area around Washington, D.C. could be subjected to terrorist attacks. Additionally, we rely on our network and third-party infrastructure and enterprise applications, internal technology systems and our website for our development, marketing, operational support, hosted services and sales activities. In the event of a major hurricane, earthquake or catastrophic event such as fire, power loss, telecommunications failure, cyberattack, war or terrorist attack, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our software development, lengthy interruptions in our services, breaches of data security and loss of critical data, all of which could have an adverse effect on our future operating results.

### ***Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the United States.***

Accounting principles generally accepted in the United States, or U.S. GAAP, are subject to interpretation by the Financial Accounting Standards Board, or FASB, the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and could affect the reporting of transactions completed before the announcement of a change.

In particular, in May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which supersedes the revenue recognition requirements in ASC 605, *Revenue Recognition*. The core principle of ASU 2014-09 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. As an “emerging growth company” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use this extended transition period under the JOBS Act with respect to ASU 2014-09, which will result in ASU 2014-09 becoming applicable to us on January 1, 2019.

We are evaluating ASU 2014-09 and have not determined the impact it may have on our financial reporting. If, for example, we were required to recognize revenue differently with respect to our term license subscriptions and our cloud-based licenses, the differential revenue recognition may cause variability in our reported operating results due to periodic or long-term changes in the mix between term license subscriptions and cloud subscriptions to our platform.

### ***If our estimates or judgments relating to our critical accounting policies prove to be incorrect, our results of operations could be adversely affected.***

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and

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accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as provided in “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition, income taxes and the related valuation allowance, stock-based compensation and fair value measurements for our previously outstanding preferred stock warrant. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our Class A common stock.

### ***Adverse economic conditions may negatively impact our business.***

Our business depends on the overall demand for enterprise software and on the economic health of our current and prospective customers. The financial recession that began in 2008 resulted in a significant weakening of the economy in the United States and Europe and of the global economy, more limited availability of credit, a reduction in business confidence and activity, and other difficulties that may affect one or more of the industries to which we sell our platform. In addition, the economies of countries in Europe have been experiencing weakness associated with high sovereign debt levels, weakness in the banking sector and uncertainty over the future of the Euro zone. We have operations in the United Kingdom and in Europe and current and potential new customers in Europe. If economic conditions in Europe and other key markets for our platform continue to remain uncertain or deteriorate further, many customers may delay or reduce their information technology spending. This could result in reductions in sales of our platform, a decrease in our renewal rate, longer sales cycles, reductions in subscription duration and value, slower adoption of new technologies and increased price competition. Any of these events would likely have an adverse effect on our business, operating results and financial position.

### **Risks Related to Government Regulation, Data Collection, Intellectual Property and Litigation**

#### ***Failure to comply with governmental laws and regulations could harm our business.***

Our business is subject to regulation by various federal, state, local and foreign governments. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, injunctions or other collateral consequences. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in professional fees. Enforcement actions and sanctions could harm our business, reputation, results of operations and financial condition.

#### ***Because our software could be used to collect and store personal information, domestic and international privacy concerns could result in additional costs and liabilities to us or inhibit sales of our software.***

Personal privacy has become a significant issue in the United States and in many other countries where we offer our software for sale. The regulatory framework for privacy issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Many federal, state and foreign government bodies and agencies have adopted or are considering adopting laws and regulations regarding the collection, use, storage and disclosure of personal information and breach notification procedures. Interpretation of these laws, rules and regulations and their application to our software and professional services in the United States and foreign jurisdictions is ongoing and cannot be fully determined at this time.

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In the United States, these include rules and regulations promulgated under the authority of the Federal Trade Commission, the Electronic Communications Privacy Act, Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act of 1996, the Gramm Leach Bliley Act and state laws relating to privacy and data security. Internationally, virtually every jurisdiction in which we operate has established its own data security and privacy legal framework with which we or our customers must comply. Since we are agnostic as to the data uploaded into our cloud offering by our cloud offering customers or processed by our platform in on-premises deployments, we may be hosting or otherwise processing substantial amounts of individually identifiable health information and other types of personally identifiable information.

In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards that may apply to us. Because the interpretation and application of privacy and data protection laws are still uncertain, it is possible that these laws and other actual or alleged legal obligations, such as contractual or self-regulatory obligations, may be interpreted and applied in a manner that is inconsistent with our existing data management practices or the features of our platform. If so, in addition to the possibility of fines, lawsuits and other claims, we could be required to fundamentally change our business activities and practices or modify our software, which could have an adverse effect on our business. Any inability to adequately address privacy concerns, even if unfounded, or comply with applicable privacy or data protection laws, regulations and policies, could result in additional cost and liability to us, damage our reputation, inhibit sales and adversely affect our business.

Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations, and policies that are applicable to the businesses of our customers may limit the use and adoption of, and reduce the overall demand for, our platform. Privacy concerns, whether valid or not valid, may inhibit market adoption of our platform particularly in certain industries and foreign countries.

### ***Any failure to protect our proprietary technology and intellectual property rights could substantially harm our business and operating results.***

Our success and ability to compete depend in part on our ability to protect our proprietary technology and intellectual property. To safeguard these rights, we rely on a combination of patent, trademark, copyright and trade secret laws and contractual protections in the United States and other jurisdictions, all of which provide only limited protection and may not now or in the future provide us with a competitive advantage.

As of September 30, 2017, we had two issued patents relating to our SAIL technology and two patent applications pending in the United States relating to our platform. We cannot assure you that any patents will issue from any patent applications, that patents that issue from such applications will give us the protection that we seek or that any such patents will not be challenged, invalidated or circumvented. Any patents that may issue in the future from our pending or future patent applications may not provide sufficiently broad protection and may not be enforceable in actions against alleged infringers. Obtaining and enforcing software patents in the United States is becoming increasingly challenging. Any patents we have obtained or may obtain in the future may be found to be invalid or unenforceable in light of recent and future changes in the law. We have registered the “Appian” name and logo in the United States and certain other countries. We have registrations and/or pending applications for additional marks in the United States; however, we cannot assure you that any future trademark registrations will be issued for pending or future applications or that any registered trademarks will be enforceable or provide adequate protection of our proprietary rights. We also license software from third parties for integration into our software, including open source software and other software available on commercially reasonable terms. We cannot assure you that such third parties will maintain such software or continue to make it available.

In order to protect our unpatented proprietary technologies and processes, we rely on trade secret laws and confidentiality and invention assignment agreements with our employees, consultants, strategic partners, vendors and others. Some of our customer contracts also require us to place our proprietary source code in escrow for the

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benefit of our customer in the event we go bankrupt, become insolvent or are unable to fulfill our support obligations under our customer contracts. Also, despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, copy, reverse engineer or otherwise obtain and use them. In addition, others may independently discover our trade secrets, in which case we would not be able to assert trade secret rights, or develop similar technologies and processes. Further, the contractual provisions that we enter into may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of unauthorized use or disclosure of our proprietary technology or intellectual property rights. Moreover, policing unauthorized use of our technologies, trade secrets and intellectual property is difficult, expensive and time-consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. To the extent that we expand our activities outside of the United States, our exposure to unauthorized copying and use of our platform and proprietary information may increase. We may be unable to determine the extent of any unauthorized use or infringement of our platform, technologies or intellectual property rights.

There can be no assurance that the steps that we take will be adequate to protect our proprietary technology and intellectual property, that others will not develop or patent similar or superior technologies, products or services, or that our trademarks, patents, and other intellectual property will not be challenged, invalidated or circumvented by others. Furthermore, effective trademark, patent, copyright, and trade secret protection may not be available in every country in which our software is available or where we have employees or independent contractors. In addition, the legal standards relating to the validity, enforceability, and scope of protection of intellectual property rights in internet and software-related industries are uncertain and still evolving.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect these rights. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims and countersuits attacking the validity and enforceability of our intellectual property rights. Our failure to secure, protect and enforce our intellectual property rights could seriously adversely affect our brand and adversely impact our business.

***We may be subject to intellectual property rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages and could limit our ability to use certain technologies.***

Companies in the software and technology industries, including some of our current and potential competitors, own significant numbers of patents, copyrights, trademarks and trade secrets and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. In addition, many of these companies have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. The litigation may involve patent holding companies or other adverse patent owners that have no relevant product revenue and against which our patents may therefore provide little or no deterrence. In the past, we have been subject to allegations of patent infringement that were unsuccessful, and we may in the future be subject to claims that we have misappropriated, misused, or infringed other parties' intellectual property rights, and, to the extent we gain greater market visibility or face increasing competition, we face a higher risk of being the subject of intellectual property infringement claims, which is not uncommon with respect to enterprise software companies. We also generally grant our customers ownership of any custom applications that we develop for them, subject to our continued ownership of our pre-existing intellectual property rights, and in the past, a customer for whom we have developed custom applications has incorrectly alleged that applications we have independently developed infringed the customer's intellectual property rights. In addition, we have in the past and may in the future be subject to claims that employees or contractors, or we, have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of our competitors or other parties. To the extent that intellectual property claims are made against our customers based on their usage of our technology, we have certain

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obligations to indemnify and defend such customers from those claims. The term of our contractual indemnity provisions often survives termination or expiration of the applicable agreement. Large indemnity payments, defense costs or damage claims from contractual breach could harm our business, results of operations and financial condition.

There may be third-party intellectual property rights, including issued or pending patents that cover significant aspects of our technologies or business methods. Any intellectual property claims, with or without merit, could be very time-consuming, could be expensive to settle or litigate, could divert our management's attention and other resources and could result in adverse publicity. These claims could also subject us to making substantial payments for legal fees, settlement payments, and other costs or damages, potentially including treble damages if we are found to have willfully infringed patents or copyrights. These claims could also result in our having to stop making, selling, offering for sale, or using technology found to be in violation of a third party's rights. We might be required to seek a license for the third-party intellectual property rights, which may not be available on reasonable terms or at all. Even if a license is available to us, we may be required to pay significant upfront fees, milestones or royalties, which would increase our operating expenses. Moreover, to the extent we only have a license to any intellectual property used in our platform, there may be no guarantee of continued access to such intellectual property, including on reasonable terms. As a result, we may be required to develop alternative non-infringing technology, which could require significant effort and expense. If a third party is able to obtain an injunction preventing us from accessing such third-party intellectual property rights, or if we cannot license or develop technology for any infringing aspect of our business, we would be forced to limit or stop sales of our software or cease business activities covered by such intellectual property, and may be unable to compete effectively. Any of these results would adversely affect our business, results of operations, financial condition and cash flows.

***Changes in laws and regulations related to the internet or changes in the internet infrastructure itself may diminish the demand for our platform, and could have a negative impact on our business.***

The future success of our business, and particularly our cloud offering, depends upon the continued use of the internet as a primary medium for commerce, communication and business applications. Federal, state or foreign government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting the use of the internet as a commercial medium. Changes in these laws or regulations could require us to modify our platform in order to comply with these changes. In addition, government agencies or private organizations may begin to impose taxes, fees or other charges for accessing the internet or commerce conducted via the internet. These laws or charges could limit the growth of internet-related commerce or communications generally, resulting in reductions in the demand for internet-based solutions such as ours.

In addition, the use of the internet as a business tool could be adversely affected due to delays in the development or adoption of new standards and protocols to handle increased demands of internet activity, security, reliability, cost, ease of use, accessibility, and quality of service. The performance of the internet and its acceptance as a business tool have been adversely affected by "viruses," "worms" and similar malicious programs and the internet has experienced a variety of outages and other delays as a result of damage to portions of its infrastructure. If the use of the internet is adversely affected by these issues, demand for our platform could suffer.

***Forecasting our estimated annual effective tax rate for financial accounting purposes is complex and subject to uncertainty, and there may be material differences between our forecasted and actual tax rates.***

Forecasts of our income tax position and effective tax rate for financial accounting purposes are complex and subject to uncertainty because our income tax position for each year combines the effects of a mix of profits earned and losses incurred by us in various tax jurisdictions with a broad range of income tax rates, as well as changes in the valuation of deferred tax assets and liabilities, the impact of various accounting rules and changes to these rules and tax laws, the results of examinations by various tax authorities, and the impact of any

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acquisition, business combination or other reorganization or financing transaction. To forecast our global tax rate, we estimate our pre-tax profits and losses by jurisdiction and forecast our tax expense by jurisdiction. If the mix of profits and losses, our ability to use tax credits, or effective tax rates by jurisdiction is different than those estimated, our actual tax rate could be materially different than forecasted, which could have a material impact on our results of business, financial condition and results of operations.

***Our operating results may be negatively affected if we are required to pay additional state sales tax, value added, or other transaction taxes, and we could be subject to liability with respect to all or a portion of past or future sales.***

We currently collect and remit sales and use, value added and other transaction taxes in certain of the jurisdictions where we do business based on our assessment of the amount of taxes owed by us in such jurisdictions. However, in some jurisdictions in which we do business, we do not believe that we owe such taxes, and therefore we currently do not collect and remit such taxes in those jurisdictions or record contingent tax liabilities in respect of those jurisdictions.

Further, due to uncertainty in the application and interpretation of applicable tax laws in various jurisdictions, we may be exposed to sales and use, value added or other transaction tax liability. A successful assertion that we are required to pay additional taxes in connection with sales of our platform, or the imposition of new laws or regulations requiring the payment of additional taxes, would create increased costs and administrative burdens for us. If we are subject to additional taxes and determine to offset such increased costs by collecting and remitting sales taxes from our customers, or otherwise passing those costs through to our customers, companies may be discouraged from using our platform. Any increased tax burden may decrease our ability or willingness to compete in relatively burdensome tax jurisdictions, result in substantial tax liabilities related to past sales or otherwise harm our business and operating results.

***We are a multinational organization faced with increasingly complex tax issues in many jurisdictions, and we could be obligated to pay additional taxes in various jurisdictions.***

As a multinational organization, we may be subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could have a material adverse effect on our liquidity and operating results. In addition, the authorities in these jurisdictions could review our tax returns and impose additional tax, interest and penalties, and the authorities could claim that various withholding requirements apply to us or our subsidiaries or assert that benefits of tax treaties are not available to us or our subsidiaries, any of which could have a material impact on us and the results of our operations.

***Our ability to use net operating losses to offset future taxable income may be subject to certain limitations.***

As of December 31, 2016, we had federal and state net operating loss carryforwards, or NOLs, at Appian Corporation of \$1.8 million and \$1.7 million, respectively, available to offset future taxable income, which substantially expire in 2036 if not utilized. A lack of future taxable income would adversely affect our ability to utilize these NOLs before they expire. Under the provisions of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code, substantial changes in our ownership may limit the amount of pre-change NOLs that can be utilized annually in the future to offset taxable income. Section 382 of the Internal Revenue Code, or Section 382, imposes limitations on a company's ability to use NOLs if a company experiences a more-than-50-percent ownership change over a three-year testing period. Based upon our analysis as of December 31, 2016, we have determined that we do not expect these limitations to impair our ability to use our NOLs prior to expiration. However, if changes in our ownership occur in the future, our ability to use our NOLs may be further limited. For these reasons, we may not be able to utilize a material portion of the NOLs, even if we achieve profitability.



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As of December 31, 2016, we also had federal NOLs at Appian Software Switzerland of \$23.7 million, which expire in 2021 through 2023, if unused. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we will pay more taxes than if we were able to fully utilize our NOLs. This could adversely affect our operating results and the market price of our Class A common stock.

***We are subject to anti-corruption laws with respect to our domestic and international operations and non-compliance with such laws can subject us to criminal and/or civil liability and materially harm our business.***

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the United Kingdom Bribery Act 2010, and other anti-corruption laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit our company from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We use third-party law firms, accountants, and other representatives for regulatory compliance, sales, and other purposes in several countries. We can be held liable for the corrupt or other illegal activities of these third-party representatives, our employees, contractors, and other agents, even if we do not explicitly authorize such activities. In addition, although we have implemented policies and procedures to ensure compliance with anti-corruption laws, there can be no assurance that all of our employees, representatives, contractors, or agents will comply with these laws at all times. Noncompliance with these laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees. Enforcement actions and sanctions could further harm our business, results of operations, and financial condition. Moreover, as an issuer of securities, we also are subject to the accounting and internal controls provisions of the FCPA. These provisions require us to maintain accurate books and records and a system of internal controls sufficient to detect and prevent corrupt conduct. Failure to abide by these provisions may have an adverse effect on our business, operations or financial condition.

***We are subject to governmental export and import controls and economic and trade sanctions that could impair our ability to conduct business in international markets and subject us to liability if we are not in compliance with applicable laws and regulations.***

The United States and other countries maintain and administer export and import laws and regulations, including various economic and trade sanctions including those administered by the Office of Foreign Assets Control, or OFAC, which apply to our business. We are required to comply with these laws and regulations. If we fail to comply with such laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges; fines, which may be imposed on us and responsible employees or managers; and, in extreme cases, the incarceration of responsible employees or managers.

Changes in our platform, or changes in applicable export or import laws and regulations may create delays in the introduction and sale of our platform in international markets or, in some cases, prevent the export or import of our platform to certain countries, governments or persons altogether. Any change in export or import laws and regulations or economic or trade sanctions, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons or technologies targeted by such laws and regulations could also result in decreased use of our platform, or in our decreased ability to export or sell our

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platform to existing or potential customers. Any decreased use of our services or limitation on our ability to export or sell our services would likely adversely affect our business, financial condition, and results of operations.

We incorporate encryption technology into certain of our products. Encryption products may be exported outside of the United States only with the required export authorization, including by license, license exception or other appropriate government authorization. Obtaining the necessary export license or other authorization for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. In addition, various countries regulate the import of certain encryption technology, including import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Although we take precautions to prevent our products from being provided in violation of such laws, our products may have been in the past, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. Governmental regulation of encryption technology and regulation of imports or exports, or our failure to obtain required import or export approval for our products, could harm our international sales and adversely affect our revenues.

Moreover, U.S. export control laws and economic sanctions programs prohibit the provision of services to countries, governments and persons that are subject to U.S. economic embargoes and trade sanctions. Even though we take precautions to prevent our platform from being used by U.S. sanctions targets, our platform could be used by a sanctioned person or in an embargoed country despite such precautions. Any such shipment could have negative consequences, including government investigations, penalties and reputational harm.

***If our platform fails to function in a manner that allows our customers to operate in compliance with regulations and/or industry standards, our revenue and operating results could be harmed.***

Certain of our customers use our platform to create applications that ensure secure communications given the nature of the content being distributed and associated applicable regulatory requirements. Governmental and other customers may also require our platform to comply with certain privacy, security and other certifications and standards. Our cloud platform holds various security certifications from government agencies and industry organizations, including the Federal Risk and Authorization Management Program compliance, and meets the Payment Card Industry Data Security Standard and the United States Health Insurance Portability and Accountability Act standard. Governments and industry organizations may also adopt new laws, regulations or requirements, or make changes to existing laws or regulations, that could impact the demand for, or value of, our applications. If we fail to maintain our current security certifications and/or to continue to meet security standards, or if we are unable to adapt our platform to changing legal and regulatory standards or other requirements in a timely manner, our customers may lose confidence in our platform and our business could be negatively impacted.

***Our business could be adversely affected if our employees cannot obtain and maintain required security clearances or we cannot maintain our facility security clearance.***

If and when awarded, certain U.S. government contracts require our employees to maintain various levels of security clearances, and we would be required to maintain our facility security clearance, to comply with Department of Defense, or DoD, requirements. The DoD has strict security clearance requirements for personnel who work on classified programs. Obtaining and maintaining security clearances for employees involves a lengthy process, and it is difficult to identify, recruit and retain employees who already hold security clearances. If our employees are unable to obtain security clearances in a timely manner, or at all, or if our employees who hold security clearances are unable to maintain their clearances or terminate employment with us, then a customer requiring classified work could terminate an existing contract or decide not to renew the contract upon its expiration. To the extent we are not able to maintain our facility security clearance, we may not be able to bid on or win new classified contracts.

## **Risk Related to Our Class A Common Stock and This Offering**

### ***Our stock price may be volatile, and you may lose some or all of your investment.***

The market price of our Class A common stock may be highly volatile and may fluctuate substantially as a result of a variety of factors, some of which are related in complex ways. Since shares of our Class A common stock were sold in our IPO in May 2017 at a price of \$12.00 per share, our stock price has ranged from an intraday low of \$14.60 to an intraday high of \$28.65 through November 10, 2017. Factors that may affect the market price of our Class A common stock include:

- actual or anticipated fluctuations in our financial condition and operating results;
- variance in our financial performance from expectations of securities analysts;
- changes in the prices of subscriptions to our platform;
- changes in our projected operating and financial results;
- changes in laws or regulations applicable to our platform;
- announcements by us or our competitors of significant business developments, acquisitions or new offerings;
- our involvement in any litigation;
- our sale of our Class A common stock or other securities in the future;
- changes in senior management or key personnel;
- the trading volume of our Class A common stock;
- changes in the anticipated future size and growth rate of our market; and
- general economic, regulatory and market conditions.

Recently, the stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory and market conditions, may negatively impact the market price of our Class A common stock. If the market price of our Class A common stock after this offering does not exceed the public offering price, you may lose some or all of your investment. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management's attention.

### ***An active public trading market may not continue to develop or be sustained.***

Prior to the completion of our IPO in May 2017, no public market for our Class A common stock existed. An active public trading market for our Class A common stock may not continue to develop or be sustained. The lack of an active market may impair your ability to sell your shares of Class A common stock at the time you wish to sell them or at a price that you consider reasonable. The lack of an active market may also reduce the fair value of your shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and may impair our ability to acquire other companies or technologies by using our shares as consideration.

### ***Future sales of our Class A common stock in the public market could cause the market price of our Class A common stock to decline.***

Sales of a substantial number of shares of our Class A common stock in the public market, or the perception that these sales might occur, could depress the market price of our Class A common stock and could impair our

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ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that such sales may have on the prevailing market price of our Class A common stock.

All of our executive officers, directors and the selling stockholders selling shares with this offering, as well as certain of our large stockholders, are subject to lock-up agreements that restrict their ability to transfer shares of our capital stock for 90 days from the date of this prospectus. Upon completion of this offering, based on the number of shares outstanding at September 30, 2017, we will have outstanding 60,471,930 shares of common stock, assuming no exercise of outstanding options or warrants other than the exercise of options to purchase 195,200 shares in connection with this offering. Of these shares, the 7,187,500 shares of Class A common stock issued in our IPO and the 3,800,000 shares of Class A common stock sold in this offering will be freely tradable immediately, and 338,899 shares of Class A common stock issuable upon conversion of outstanding Class B common stock will be eligible for sale in the public market on November 21, 2017 following the expiration of the 180-day lock-up period in connection with our IPO, up to one million shares of our Class A common stock issuable upon conversion of shares of our Class B common stock will be eligible for sale following the distribution of such shares from Novak Biddle Venture Partners to their limited partners, which distribution may occur on or after December 8, 2017, and 48,145,531 additional shares of common stock will be available for sale in the public market beginning 90 days after the date of this prospectus following the expiration of new lock-up agreements between some of our stockholders and the underwriters, in each case subject to volume, manner of sale and other limitations of Rule 144. Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC may, in their sole discretion, permit our stockholders who are subject to these lock-up agreements to sell shares prior to the expiration of the lock-up agreements. In connection with this offering, Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC, on behalf of the underwriters, have consented to the release of these lock-up restrictions with respect to 4,370,000 shares of Class A common stock to be sold in this offering by the selling stockholders (including 570,000 shares of Class A common stock that may be sold by certain selling stockholders upon exercise of the underwriters' option to purchase additional shares), including 527,602 shares beneficially owned by our directors and executive officers or their affiliated entities. The releases will take effect on the pricing of this offering.

In addition, as of September 30, 2017, there were 7,375,928 shares of Class B common stock and 8,000 shares of Class A common stock subject to outstanding options and 42,925 shares of Class A common stock to be issued upon the vesting of outstanding restricted stock units. We have registered all of the shares of Class A common stock issuable (i) upon conversion of the shares of Class B common stock issuable upon exercise of outstanding options, (ii) upon the exercise of outstanding options, (iii) upon the vesting of outstanding restricted stock units and (iv) upon exercise of settlement of any options or other equity incentives we may grant in the future, for public resale under the Securities Act of 1933, as amended, or the Securities Act. Accordingly, these shares may be freely sold in the public market upon issuance as permitted by any applicable vesting requirements, subject to the lock-up agreements described above and compliance with applicable securities laws.

In addition, upon the completion of this offering, holders of approximately 15,425,120 million shares of Class B common stock have rights, subject to some conditions, to require us to file registration statements for the public resale of the Class A common stock issuable upon conversion of such shares or to include such shares in registration statements that we may file for ourselves or other stockholders.

### ***The sale of shares of our Class A common stock by a single large stockholder could cause the market price of our Class A common stock to decline.***

Approximately half of our publicly traded Class A common stock is held by a single stockholder. Should this stockholder elect to sell all or a significant portion of its shares of our Class A common stock, the market price of our Class A common stock and our ability to raise capital through the sale of additional equity securities could be negatively affected. We cannot predict the effect that such a sale may have on the prevailing market price of our Class A common stock.

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***The dual class structure of our common stock and the existing ownership of capital stock by Matthew Calkins, our founder and Chief Executive Officer, has the effect of concentrating voting control with Mr. Calkins for the foreseeable future, which will limit your ability to influence corporate matters.***

Our Class B common stock has ten votes per share, and our Class A common stock, which is the stock the selling stockholders are offering in this offering, has one vote per share. Given the greater number of votes per share attributed to our Class B common stock, our Class B stockholders will collectively beneficially own shares representing approximately 98% of the voting power of our outstanding capital stock following the completion of this offering. Further, Mr. Calkins, our founder and Chief Executive Officer, together with his affiliates, will collectively beneficially own shares representing approximately 56% of the voting power of our outstanding capital stock following the completion of this offering. Consequently, Mr. Calkins, together with his affiliates, will continue to be able to control a majority of the voting power even if their stock holdings represent as few as approximately 45% of the outstanding number of shares of our common stock. This concentrated control will limit your ability to influence corporate matters for the foreseeable future. For example, Mr. Calkins will be able to control elections of directors, amendments of our certificate of incorporation or bylaws, increases to the number of shares available for issuance under our equity incentive plans or adoption of new equity incentive plans and approval of any merger or sale of assets for the foreseeable future. This concentrated control could also discourage a potential investor from acquiring our Class A common stock due to the limited voting power of such stock relative to the Class B common stock and might harm the market price of our Class A common stock. In addition, Mr. Calkins has the ability to control the management and major strategic investments of our company as a result of his position as our Chief Executive Officer and his ability to control the election or replacement of our directors. As a board member and officer, Mr. Calkins owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. However, as a stockholder, even a controlling stockholder, Mr. Calkins is entitled to vote his shares, and shares over which he has voting control, in his own interests, which may not always be in the interests of our stockholders generally.

Future transfers by Mr. Calkins and other holders of Class B common stock will generally result in those shares converting on a 1:1 basis to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long-term.

***We have not elected to take advantage of the “controlled company” exemption to the corporate governance rules for publicly-listed companies but may do so in the future.***

Because our Chief Executive Officer, Mr. Calkins, owns in excess of 50% of the voting power of our outstanding capital stock, we are eligible to elect the “controlled company” exemption to the corporate governance rules for publicly-listed companies. We have not elected to do so. If we decide to become a “controlled company” under the corporate governance rules for publicly-listed companies, we would not be required to have a majority of our board of directors be independent, nor would we be required to have a compensation committee or an independent nominating function. If we chose controlled company status in the future, our status as a controlled company could cause our Class A common stock to be less attractive to certain investors or otherwise harm our trading price.

***If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.***

The trading market for our Class A common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.

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***We do not intend to pay dividends for the foreseeable future and, as a result, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.***

We have never declared or paid any cash dividends on our common stock and we do not intend to pay any cash dividends in the foreseeable future. Although we paid a cash dividend in connection with the conversion of our Series A preferred stock to Class B common stock immediately prior to the closing of the IPO, which was agreed to at the time of the original issuance of the Series A preferred stock, we anticipate that we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

***We may invest or spend the proceeds of our IPO in ways with which you may not agree or in ways which may not yield a return.***

We used \$27.6 million of the net proceeds from our IPO to pay all remaining outstanding principal and interest under our term loan facility with Silicon Valley Bank and to pay a cash dividend to the holders of our Series A preferred stock that was payable upon the conversion of our Series A preferred stock to Class B common stock, which conversion occurred immediately prior to the closing of the IPO. We anticipate that the remaining net proceeds from our IPO will be used for working capital and other general corporate purposes. We may also use a portion of the remaining net proceeds to acquire complementary businesses, products or technologies. However, we do not have any agreements or commitments for any acquisitions at this time. Our management has considerable discretion in the application of the remaining net proceeds, and you will not have the opportunity, as part of your investment decision, to assess whether the proceeds are being used effectively. The remaining net proceeds may be invested with a view towards long-term benefits for our stockholders and this may not increase our operating results or market value. The failure by our management to apply these funds effectively may adversely affect the return on your investment.

***If you purchase shares of our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.***

Investors purchasing common stock in this offering will pay a price per share that substantially exceeds the historical net tangible book value per share, which was \$0.83 per share of common stock as of September 30, 2017. As a result of the dilution to investors purchasing shares in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation.

***We are an “emerging growth company” and we cannot be certain if the reduced reporting and disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors.***

We are an “emerging growth company,” as defined in the JOBS Act, and we may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not “emerging growth companies” including, but not limited to, the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our Class A common stock less attractive if we choose to rely on these exemptions. If some investors find our Class A common stock less attractive as a result, there may be a less active trading market for our Class A common stock and our stock price may be more volatile.

As an “emerging growth company” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private

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companies. We have elected to use this extended transition period under the JOBS Act. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our Class A common stock less attractive to investors.

***We incur increased costs as a result of operating as a public company, and our management is required to devote substantial time to compliance with our public company responsibilities and corporate governance practices.***

As a newly public company, and particularly after we are no longer an “emerging growth company,” we incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the NASDAQ Stock Market and other applicable securities rules and regulations impose various requirements on public companies. Our management and other personnel need to devote a substantial amount of time to compliance with these requirements. Moreover, these rules and regulations increase our legal and financial compliance costs and make some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain directors’ and officers’ liability insurance, compared to when we were a private company, which could make it more difficult for us to attract and retain qualified members of our board of directors. We cannot predict or estimate the amount of additional costs we will continue to incur as a public company or the timing of such costs.

***We are obligated to develop and maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our Class A common stock.***

We will be required, pursuant to Section 404 of the Sarbanes-Oxley Act, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting for the year ending December 31, 2018. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. Our independent registered public accounting firm will not be required to attest to the effectiveness of our internal control over financial reporting until our first annual report required to be filed with the SEC following the date we are no longer an “emerging growth company,” as defined in the JOBS Act. We will be required to disclose significant changes made in our internal control procedures on a quarterly basis.

We have commenced the costly and challenging process of compiling the system and processing documentation necessary to perform the evaluation needed to comply with Section 404, and we may not be able to complete our evaluation, testing and any required remediation in a timely fashion. Our compliance with Section 404 will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge and compile the system and process documentation necessary to perform the evaluation needed to comply with Section 404.

During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal control over financial reporting is effective. We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline, and we could be subject to sanctions or investigations by the NASDAQ Stock Market, the SEC or other

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regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

***Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management and limit the market price of our Class A common stock.***

In addition to the effects of our dual class structure, provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibit a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. Any of the foregoing provisions could limit the price that investors might be willing to pay in the future for shares of our Class A common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood that you would receive a premium for your shares of our Class A common stock in an acquisition.

***Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us and limit the market price of our Class A common stock.***

Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws or (4) any action asserting a claim governed by the internal affairs doctrine. Our amended and restated certificate of incorporation also provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Our amended and restated certificate of incorporation further provides that any person or entity purchasing or otherwise acquiring any interest in shares of our Class A common stock is deemed to have notice of and consented to the foregoing provisions. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us and limit the market price of our Class A common stock.



## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that involve substantial risks and uncertainties. The forward-looking statements are contained principally in the sections of this prospectus entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” but are also contained elsewhere in this prospectus. In some cases, you can identify forward-looking statements by the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “might,” “objective,” “ongoing,” “plan,” “predict,” “project,” “potential,” “should,” “will,” or “would,” or the negative of these terms, or other comparable terminology intended to identify statements about the future. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from the information expressed or implied by these forward-looking statements. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements. In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. The forward-looking statements and opinions contained in this prospectus are based upon information available to us as of the date of this prospectus and, while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. Forward-looking statements include statements about:

- our market opportunity and the expansion of our core software markets in general;
- the effects of increased competition as well as innovations by new and existing competitors in our market;
- our ability to adapt to technological change and effectively enhance, innovate and scale our platform and professional services;
- our ability to effectively manage or sustain our growth and to achieve profitability;
- potential acquisitions and integration of complementary businesses and technologies;
- our expected use of proceeds;
- our ability to maintain, or strengthen awareness of, our brand;
- perceived or actual problems with the integrity, reliability, quality or compatibility of our platform, including unscheduled downtime or outages;
- future revenue, hiring plans, expenses, capital expenditures, capital requirements and stock performance;
- our ability to attract and retain qualified employees and key personnel and further expand our overall headcount;
- our ability to stay abreast of new or modified laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- our ability to maintain, protect and enhance our intellectual property;
- costs associated with defending intellectual property infringement and other claims; and
- the future trading prices of our Class A common stock and the impact of securities analysts’ reports on these prices.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this prospectus.

You should refer to the “Risk Factors” section of this prospectus for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking

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statements. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

## INDUSTRY AND MARKET DATA

Information contained in this prospectus concerning our industry and the market in which we operate, including our general expectations and market position, market opportunity and market size is based on information from various sources, including independent industry publications by Forrester Research Inc., or Forrester, Aite Group, LLC, or Aite, International Data Corporation, or IDC, Gartner, Inc., or Gartner, and S&P Global. In presenting this information, we have also made assumptions based on such data and other similar sources, and on our knowledge of, and in our experience to date in, the markets for our services. This information involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. Although neither we, the selling stockholders nor the underwriters have independently verified the accuracy or completeness of any third-party information, we believe the market position, market opportunity and market size information included in this prospectus is reliable. The industry in which we operate is subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the “Risk Factors” section. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

The Forrester studies described herein, one of which was commissioned by us, represent data, research, opinions or viewpoints prepared by Forrester and are not representations of fact. We have been advised by Forrester that its studies speak as of their original date (and not as of the date of this prospectus) and any opinions expressed in the studies are subject to change without notice.

The Gartner report described in this prospectus represents data, research opinion or viewpoints published, as part of a syndicated subscription service, by Gartner and are not representations of fact. The Gartner report speaks as of its original publication date, and not as of the date of this prospectus, and the opinions expressed in the Gartner report are subject to change without notice. Gartner does not endorse any vendor, product or service depicted in its research publications, and does not advise technology users to select only those vendors with the highest ratings or other designation. Gartner research publications consist of the opinions of Gartner’s research organization and should not be construed as statements of fact. Gartner disclaims all warranties, expressed or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

The S&P Global Market Intelligence data described herein represents proprietary data gathered by S&P Global Market Intelligence and is not a representation of fact. The S&P Global Market Intelligence data is as of February 2, 2017 (and not as of the date of this prospectus) and is subject to change without notice.

**USE OF PROCEEDS**

The selling stockholders will receive all of the net proceeds from this offering. We will not receive any of the proceeds from the sale of shares of Class A common stock offered by the selling stockholders. We will, however, bear the costs associated with the sale of shares by the selling stockholders, other than underwriting discounts and commissions.

### MARKET PRICE OF COMMON STOCK

Shares of our Class A common stock commenced trading on the NASDAQ Global Market under the symbol “APPN” on May 25, 2017. Prior to that date, there was no public market for our common stock. The following table sets forth, for the periods indicated, the high and low intra-day sale prices in dollars of our Class A common stock as reported on the NASDAQ Global Market:

	<u>High</u>	<u>Low</u>
<b>Year ending December 31, 2017</b>		
Second Quarter (from May 25, 2017)	\$20.72	\$14.60
Third Quarter	\$28.65	\$17.02
Fourth Quarter (through November 10, 2017)	\$27.89	\$21.94

There is no trading market for our Class B common stock.

On November 10, 2017, the last reported sale price of our Class A common stock on the NASDAQ Global Market was \$22.60 per share. As of November 10, 2017, there were nine stockholders of record of our Class A common stock and 123 stockholders of record of our Class B common stock. These figures do not reflect the beneficial ownership or shares held in nominee name.

## **DIVIDEND POLICY**

We have never declared or paid any dividends on our common stock. Although we paid a cash dividend of \$7.6 million in connection with the conversion of our then-existing Series A preferred stock to Class B common stock immediately prior to the closing of our IPO, which was agreed to at the time of the original issuance of the Series A preferred stock, we currently intend to retain all available funds and any future earnings for the operation and expansion of our business. Accordingly, we do not anticipate declaring or paying cash dividends in the foreseeable future. The payment of any future dividends will be at the discretion of our board of directors and will depend on our results of operations, capital requirements, financial condition, prospects, contractual arrangements, any limitations on payment of dividends present in our current and future debt agreements, and other factors that our board of directors may deem relevant. We may also be subject to covenants under future debt arrangements that place restrictions on our ability to pay dividends.

**CAPITALIZATION**

The following table sets forth our cash and cash equivalents and our capitalization as of September 30, 2017:

- on an actual basis; and
- on a pro forma basis to reflect (1) the exercise of options to purchase 195,200 shares by some of the selling stockholders in connection with this offering (including our receipt of payment of the exercise price of those options) and (2) the automatic conversion of 3,800,000 shares of our Class B common stock held by the selling stockholders into an equivalent number of our Class A common stock upon the sale by the selling stockholders in this offering.

You should read this table together with “Selected Consolidated Financial Data,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and the related notes appearing elsewhere in this prospectus.

	As of September 30, 2017	
	<u>Actual</u>	<u>Pro Forma</u>
	(in thousands)	
Cash and cash equivalents	<u>\$ 72,289</u>	<u>\$ 72,434</u>
Stockholders’ equity:		
Class A common stock, \$0.0001 par value per share; 500,000,000 shares authorized and 7,203,271 shares issued and outstanding, actual; 500,000,000 shares authorized, 11,003,271 shares issued and outstanding, pro forma	\$ 1	1
Class B common stock, \$0.0001 par value per share; 100,000,000 shares authorized and 53,073,459 shares issued and outstanding, actual; 100,000,000 shares authorized, 49,468,659 shares issued and outstanding, pro forma	5	5
Additional paid-in capital	138,767	138,912
Accumulated other comprehensive income	451	451
Accumulated deficit	<u>(89,320)</u>	<u>(89,320)</u>
Total stockholders’ equity	<u>49,904</u>	<u>50,049</u>
Total capitalization	<u>\$ 49,904</u>	<u>\$ 50,049</u>

The outstanding share information in the table above excludes:

- 7,383,928 shares of Class B common stock issuable upon the exercise of options outstanding as of September 30, 2017, at a weighted-average exercise price of \$6.16 per share, of which 175,200 shares are expected to be issued upon the exercise of options by some of the selling stockholders in connection with this offering;
- 4,000 shares of Class A common stock issuable upon the exercise of options and 689,200 shares of Class A common stock issuable upon the vesting of restricted stock units granted subsequent to September 30, 2017; and
- 6,481,622 shares of Class A common stock reserved for future issuance as of September 30, 2017 pursuant to our 2017 Equity Incentive Plan.

## **DILUTION**

If you invest in our Class A common stock, your interest will be diluted to the extent of the difference between the public offering price per share of our Class A common stock and the net tangible book value per share of our common stock immediately after the closing of this offering.

Our historical net tangible book value as of September 30, 2017 was \$49.9 million, or \$0.83 per share of common stock. Our historical net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of September 30, 2017.



**SELECTED CONSOLIDATED FINANCIAL DATA**

We derived the selected consolidated statements of operations data for the years ended December 31, 2014, 2015 and 2016 and the selected consolidated balance sheet data as of December 31, 2015 and 2016 from our audited consolidated financial statements included elsewhere in this prospectus. We derived the selected consolidated statements of operations data for the nine months ended September 30, 2016 and 2017 and the selected consolidated balance sheet data as of September 30, 2017 from the unaudited condensed consolidated financial statements included elsewhere in this prospectus. We have prepared the unaudited condensed consolidated financial statements on the same basis as the audited consolidated financial statements, and the unaudited financial data include, in our opinion, all adjustments, consisting only of normal recurring adjustments that we consider necessary for a fair presentation of our consolidated financial position and results of operations for these periods. Our historical results are not necessarily indicative of the results to be expected in the future and our operating results for the nine months ended September 30, 2017 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2017.

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When you read this selected consolidated financial data, it is important that you read it together with the historical consolidated financial statements and related notes to those statements, as well as “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” included elsewhere in this prospectus.

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
(in thousands, except share and per share data)					
<b>Consolidated Statements of Operations Data:</b>					
Revenue:					
Subscriptions, software and support	\$ 37,076	\$ 53,207	\$ 69,972	\$ 50,607	\$ 66,116
Professional services	51,920	57,997	62,951	48,569	60,059
Total revenue	88,996	111,204	132,923	99,176	126,175
Cost of revenue:					
Subscriptions, software and support	4,273	6,079	7,437	5,508	6,891
Professional services	32,524	42,402	42,686	34,016	39,049
Total cost of revenue	36,797	48,481	50,123	39,524	45,940
Gross profit	52,199	62,723	82,800	59,652	80,235
Operating expenses:					
Sales and marketing	29,088	38,300	54,137	39,477	59,503
Research and development	13,488	16,750	22,994	16,925	25,867
General and administrative	23,373	12,515	17,039	12,779	19,721
Total operating expenses	65,949	67,565	94,170	69,181	105,091
Operating loss	(13,750)	(4,842)	(11,370)	(9,529)	(24,856)
Other expense (income):					
Other expense (income), net	2,086	1,579	1,792	129	(1,658)
Interest expense	19	188	982	726	451
Total other expense (income)	2,105	1,767	2,774	855	(1,207)
Net loss before income taxes	(15,855)	(6,609)	(14,144)	(10,384)	(23,649)
Income tax expense (benefit)	1,204	378	(1,683)	(2,106)	489
Net loss	(17,059)	(6,987)	(12,461)	(8,278)	(24,138)
Accretion of dividends on convertible preferred stock	856	861	857	642	357
Net loss attributable to common stockholders	\$ (17,915)	\$ (7,848)	\$ (13,318)	\$ (8,920)	\$ (24,495)
Net loss per share attributable to common stockholders, basic and diluted <sup>(1)</sup>	\$ (0.50)	\$ (0.23)	\$ (0.39)	\$ (0.26)	\$ (0.53)
Weighted-average common shares outstanding, basic and diluted	35,717,803	34,274,718	34,274,718	34,274,718	45,855,044

(1) See note 9 to our audited consolidated financial statements appearing elsewhere in this prospectus for further details on the calculation of basic and diluted net (loss) income per share attributable to common stockholders.

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	<u>As of December 31,</u>		<u>As of</u>
	<u>2015</u>	<u>2016</u>	<u>September 30,</u>
	<u>(in thousands)</u>		
<b>Consolidated Balance Sheet Data:</b>			
Cash and cash equivalents	\$ 31,393	\$ 31,143	\$ 72,289
Working capital <sup>(1)</sup>	19,463	12,365	51,539
Total assets	83,400	102,738	142,326
Long-term debt, including current portion	10,000	20,000	—
Deferred revenue, net of current portion	12,890	18,108	14,577
Preferred stock warrant liability	650	850	—
Total liabilities	79,375	110,815	92,422
Convertible preferred stock	54,558	55,415	—
Accumulated deficit	(51,507)	(64,825)	(89,320)
Total stockholders' (deficit) equity	(50,533)	(63,492)	49,904

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this prospectus. Some of the information contained in this discussion and analysis or set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties. You should review the "Risk Factors" section of this prospectus for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.*

### Overview

Appian provides a leading low-code software development platform as a service that enables organizations to rapidly develop powerful and unique applications. The applications created on our platform help companies drive digital transformation and competitive differentiation.

With our platform, organizations can rapidly and easily design, build and implement powerful, enterprise-grade custom applications through our intuitive, visual interface with little or no coding required. Our customers have used applications built on our low-code platform to launch new business lines, automate vital employee workflows, manage complex trading platforms, accelerate drug development and build global procurement systems. With our platform, decision makers can reimagine their products, services, processes and customer interactions by removing much of the complexity and many of the challenges associated with traditional approaches to software development.

We were formed in 1999 by Matthew Calkins, Robert Kramer, Marc Wilson and Michael Beckley, each of whom remain actively engaged in the management of our company, and we released our first software product in 2000. In 2004, we released the Appian Business Process Management Suite, with an innovative web-based, integrated development environment. We launched our cloud offering in 2007. We continued to enhance and evolve the Appian platform with our Records data management technology in 2012 and our patented Self-Assembling Interface Layer, or SAIL, technology in 2013. Our SAIL technology allows applications developed on our platform to be immediately and natively deployed across a full range of mobile and desktop devices with no additional customization, including desktop web browsers, tablets and mobile phones. In 2016, we introduced Quick Apps, which enables non-professional developers to develop native web and mobile applications in minutes with no coding.

In 2016 and through the nine months ended September 30, 2017, we have generated the majority of our revenue from sales of subscriptions, software and support, which include (1) SaaS subscriptions bundled with maintenance and support and hosting services, and (2) term license subscriptions bundled with maintenance and support. To a lesser extent, we also generate revenue from the sale of perpetual software license agreements and associated maintenance and support agreements.

Our subscription fees are based primarily on the number of users who access and utilize the applications built on our platform. Our customer contracts terms vary from one to five years, with an average length of three years, with most providing for payment in advance on an annual, quarterly or monthly basis. Due to the variability of our billing terms and the episodic nature of our customers purchasing additional subscriptions, we do not believe that changes in our deferred revenue in a given period are directly correlated with our revenue growth.

Since inception, we have invested in our professional services organization to help ensure that customers are able to build and deploy applications on our platform. We have several strategic partnerships, including with

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Deloitte, KPMG and PricewaterhouseCoopers for them to refer customers to us and then to provide professional services directly to the customers using our platform. We intend to further grow our base of strategic partners to provide broader customer coverage and solution delivery capabilities. In addition, over time we expect professional services revenue as a percentage of total revenue to decline as we increasingly rely on strategic partners to help our customers deploy our software. We believe our investment in professional services, including strategic partners building their practices around Appian, will drive increased adoption of our platform.

Our go-to-market strategy consists of both direct sales and sales through strategic partners. In 2017, almost half of our new customer deals were influenced by our partners. As of December 31, 2016, we had 280 customers in a wide variety of industries, of which 225 customers were commercial and 55 customers were government or non-commercial entities. Our customers include financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation organizations. Generally, our sales force targets its efforts to organizations with over 1,000 employees and \$1 billion in annual revenue. As of December 31, 2016, 32% of our commercial customers were Global 2000 organizations, and included 37 Fortune 500 companies, six of the largest 25 global financial services firms by 2016 revenue and eight of the 30 largest global healthcare companies by 2016 revenue. Revenue from government agencies represented approximately 26% of our total revenue in 2016. No single end-customer accounted for more than 10% of our total revenue in 2015 or 2016, although we had one customer that accounted for 10.7% of our total revenue in 2014.

Our platform is designed to be natively multi-lingual to facilitate collaboration and address challenges in multi-national organizations. We offer our platform globally. In 2016, 19.5% of our total revenue was generated from customers outside of the United States. Today, we operate in 11 countries. We believe that we have a significant opportunity to grow our international footprint. We are investing in new geographies, including through investment in direct and indirect sales channels, professional services and customer support and implementation partners.

We have experienced strong revenue growth, with revenue of \$89.0 million, \$111.2 million, \$132.9 million and \$126.2 million in 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively. Our subscription revenue was \$22.8 million, \$41.5 million, \$60.0 million and \$59.3 million in 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively.

We have invested in developing our platform, expanding our sales and marketing and research and development capabilities, and providing general and administrative resources to support our growth. We intend to continue to invest in our business to take advantage of our market opportunity. As a result, we incurred net losses of \$17.1 million, \$7.0 million, \$12.5 million and \$24.1 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. We also had operating cash flows of \$1.5 million, \$(2.1) million, \$(7.8) million and \$(10.1) million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively.

In May 2017, we closed our IPO of 7,187,500 shares of our Class A common stock at an offering price of \$12.00 per share, including 937,500 shares pursuant to the underwriters' option to purchase additional Class A shares, resulting in net proceeds to us of \$77.8 million, after deducting underwriting discounts and commissions of \$6.0 million and offering expenses of \$2.4 million.

### **Our Business Model**

Our business model focuses on maximizing the lifetime value of customer relationships, which is a function of the duration of a customer's deployment of Appian as well as the price and number of subscriptions of Appian that a customer purchases. The costs we incur with respect to any customer may exceed revenue from that customer in earlier periods because we generally recognize costs associated with customer acquisition faster than we generate and recognize the associated revenue. We incur significant customer acquisition costs, including expense associated with hiring new sales representatives, who generally take more than one year to become

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productive given the length of our sales cycle, and marketing costs, all of which are expensed as incurred. Our customer contract terms vary from one to five years, with an average length of three years, with most providing for payment in advance on an annual, quarterly or monthly basis, and we recognize subscription revenue ratably over the term of the subscription period.

At the same time, we believe that the costs we incur to retain customers and drive additional purchases of software are lower than our customer acquisition costs on a relative basis. Over time, we expect a large portion of our customers to renew their subscriptions and purchase additional subscriptions as they continue to build more applications and add more users to our platform. Over the last three completed fiscal years, we had an average subscription renewal rate of 95%. We calculate our subscription renewal rate by dividing (i) the subscription revenue from renewing customers in the current 12-month period that were customers during the entirety of the prior 12-month period, giving effect to price increases but excluding additional subscriptions for additional users, or upsells, by (ii) our subscription revenue from all customers in the corresponding prior 12-month period that were customers during the entirety of such prior 12-month period. For example, to obtain our subscription renewal rate for the 12-month period ended December 31, 2016, we identified the amount of subscription revenue in 2016 from customers that were our customers for all of 2015, and subtracted the amount of upsells to such customers in 2016. We then divided the balance of 2016 subscription revenue from such customers by all subscription revenue generated in 2015 from customers that were customers for the entirety of 2015. With respect to the average for our last three completed fiscal years, we calculated the average of the three applicable 12-month periods. We also expect the proportion of annual revenue from existing customers to grow relative to annual revenue from new customers. We believe this mix shift over time will have a positive impact on our operating margins, as we expect the percentage of revenue spent on sales and marketing to decline.

We measure the effectiveness of our business model by comparing the lifetime value of our customer relationships to our customer acquisition costs. We calculate lifetime customer value as (1) average gross margin multiplied by average subscription and maintenance and support revenue from customers for a given month divided by (2) the average percentage of monthly recurring revenue that did not renew in each month for the previous 12 months. We then divide this calculated lifetime customer value by our customer acquisition cost, which is the total sales and marketing expense incurred during the corresponding month. On a rolling twelve month basis, we estimate that for each of 2014, 2015 and 2016 the average lifetime value of a customer has exceeded 6x the associated average cost of acquiring them.

We also believe that purchases of professional services lead to increases in subscription revenue. For customers that were subscription software customers in 2016 and that also used our professional services since becoming customers, the median purchase of professional services during their first twelve months of subscribership was \$142,430, as compared to \$43,329 during the next twelve months and \$28,849 during the third twelve months. By contrast, the median purchase of subscription software during their first twelve months of subscribership was \$109,381, as compared to \$162,749 in the second twelve months and \$241,371 in the third twelve months. For the same customers, the median proportion of subscription software to overall subscription software and professional services purchases in the first twelve months of subscribership was 44%, as compared to 77% in the second twelve months and 90% in the third twelve months.

### **Key Factors Affecting Our Performance**

#### ***Market Adoption of Our Platform***

Our ability to grow our customer base and drive market adoption of our platform is affected by the pace at which organizations digitally transform. We expect that our revenue growth will be primarily driven by the pace of adoption and penetration of our platform. We offer a leading custom software development platform and intend to continue to invest to expand our customer base. The degree to which prospective customers recognize the need for low-code software that enables organizations to digitally transform, and subsequently allocate budget dollars to purchase our software, will drive our ability to acquire new customers and increase sales to existing customers, which, in turn, will affect our future financial performance.

### ***Number of Customers***

We believe we have a substantial opportunity to grow our customer base. We define a customer as an entity with an active subscription or maintenance and support contract related to a perpetual software license as of the specified measurement date. To the extent we contract with one or more entities under common control, we count those entities as separate customers. We have aggressively invested, and intend to continue to invest, in our sales force in order to drive sales to new customers. In particular, we have recently made, and plan to continue to make, investments to enhance the expertise of our sales and marketing organization within our key industry verticals of financial services, healthcare and government. In addition, we have established relationships with strategic partners who work with organizations undergoing digital transformations. We had a total customer count of 254, 266 and 280 as of December 31, 2014, 2015 and 2016, respectively, which includes customers with active software subscription agreements or with maintenance and support contracts, and our number of customers with active software subscription agreements was 142, 178 and 206 as of December 31, 2014, 2015 and 2016, respectively. As of December 31, 2016, 32% of our commercial customers were Global 2000 organizations, and included 37 Fortune 500 companies, six of the largest 25 global financial services firms by 2016 revenue and eight of the 30 largest global healthcare companies by 2016 revenue. Our ability to continue to grow our customer base is dependent, in part, upon our ability to compete within the increasingly competitive markets in which we participate.

### ***Further Penetration of Existing Customers***

Our sales force seeks to generate additional revenue from existing customers by adding new users to our platform. Many of our customers begin by building a single application and then grow to build dozens of applications on our platform. Generally, the development of new applications on our platform results in the expansion of our user base within an organization and a corresponding increase in revenue to us because we charge subscription fees on a per-user basis for the significant majority of our customer contracts. As a result of this “land and expand” strategy, we have generated significant additional revenue from our customer base. For example, customers that first purchased our software prior to January 1, 2014, or the Customer Cohort, and were still customers on December 31, 2016, increased approximately seven times, on average, their purchases with us over that period, as measured by total contract value. Within the Customer Cohort, our top 25 customers as of December 31, 2016 increased their purchases with us by approximately 13 times, on average, over the same period, applying the same methodology. Our ability to increase sales to existing customers will depend on a number of factors, including the size of our sales force and professional services teams, customers’ level of satisfaction with our platform and professional services, pricing, economic conditions and our customers’ overall spending levels.

### ***Mix of Subscription and Professional Services Revenue***

We believe our professional services have driven customer success and facilitated the adoption of our platform by customers. During the initial period of deployment by a customer, we generally provide a greater amount of support in building applications and training than later in the deployment, with a typical engagement extending from two to six months. At the same time, many of our customers have historically purchased subscriptions only for a limited set of their total potential end users. As a result of these factors, the proportion of total revenue for a customer associated with professional services is relatively high during the initial deployment period. Over time, as the need for professional services associated with user deployments decreases and the number of end users increases, we expect the mix of total revenue to shift more toward subscription revenue. In addition, we intend to further grow our base of strategic partners to provide broader customer coverage and solution delivery capabilities. These partners perform professional services with respect to any new service contracts they sign. As we expand the network of strategic partners, we expect the proportion of our total revenue from subscription revenue to increase over time relative to professional services revenue.

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### **Investments in Growth**

We have made and plan to continue to make investments for long-term growth, including investment in our platform and infrastructure to continuously maximize the power and simplicity of the platform to meet the evolving needs of our customers and to take advantage of our market opportunity. We intend to continue to increase our investment in sales and marketing, as we further expand our sales teams, increase our marketing activities and grow our international operations. We expect to use a portion of the proceeds from the IPO to fund these growth strategies.

### **Other Metrics**

We monitor the following metrics to help us measure and evaluate the effectiveness of our operations (dollars in thousands):

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
Subscription Revenue	\$22,849	\$41,497	\$59,993	\$43,397	\$59,284
Subscription Revenue Retention Rate	107%	128%	112%	118%	122%

### **Subscription Revenue**

Subscription revenue is a portion of our revenue contained in the subscriptions, software and support revenue line of our consolidated statements of operations, and include (1) software as a service, or SaaS, subscriptions bundled with maintenance and support and hosting services, and (2) term license subscriptions bundled with maintenance and support. As we generally sell our software on a per-user basis, our subscription revenue for any customer is primarily determined by the number of users who access and utilize the applications built on our platform, as well as the price paid. We believe that increasing our subscription revenue is an indicator of the demand for our platform, the pace at which the market for our solutions is growing, the productivity of our sales force and strategic relationships in growing our customer base, and our ability to further penetrate our existing customer base.

### **Subscription Revenue Retention Rate**

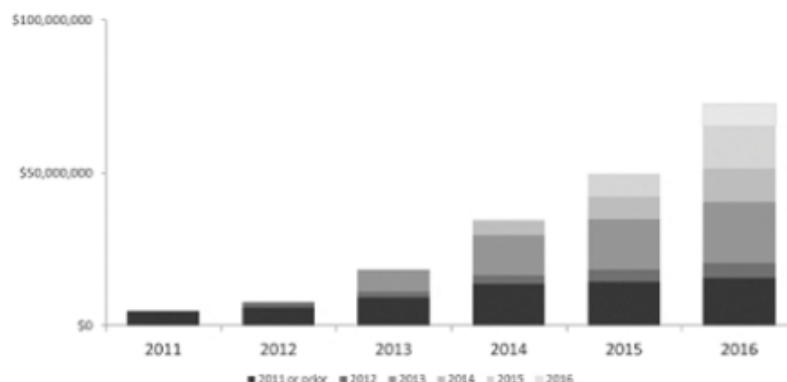
A key factor to our success is the renewal and expansion of subscription agreements with our existing customers. We calculate this metric over a set of customers who have been with us for at least one full year. To calculate our subscription revenue retention rate for a particular trailing 12-month period, we first establish the recurring subscription revenue for the previous trailing 12-month period. This effectively represents recurring dollars that we should expect in the current trailing 12-month period from the cohort of customers from the previous trailing 12-month period without any expansion or contraction. We subsequently measure the recurring subscription revenue in the current trailing 12-month period from the cohort of customers from the previous trailing 12-month period. Subscription revenue retention rate is then calculated by dividing the aggregate recurring subscription revenue in the current trailing 12-month period by the previous trailing 12-month period. This calculation includes the impact on our revenue from customer non-renewals, pricing changes and growth in the number of users on our platform. Our subscription revenue retention rate can fluctuate from period to period due to large customer contracts in any given period. For example, our subscription revenue retention rate in 2015 was impacted by a single upsell that was one-time in nature.



## Customer Cohort Analysis

We focus on acquiring new customers and growing our relationships with existing customers over time. The chart below illustrates our history of attracting new customers and expanding our revenue from them over time as they realize the benefits of building applications using our software.

*Cohort Analysis—Subscription Software Revenue*



The chart reflects annualized subscription revenue for the group of customers that became our customers in each respective cohort year. For instance, the 2013 cohort includes all customers whose contract start date was between January 1, 2013 and December 31, 2013. Annualized subscription revenue is the total amount of monthly subscription revenue for that applicable customer cohort in January of the following year multiplied by 12. We use January revenue data for the cohort of customers who first signed subscription agreements in the preceding year because January is the first month in which we are earning a full month of revenue from all such customers. Our annualized subscription revenue for the year ended December 31, 2016 for our 2013 customer cohort represented a 2.8 times increase over the annualized subscription revenue for the year ended December 31, 2013 for that 2013 customer cohort. Building upon this success, we believe a significant opportunity exists for us to acquire new customers as well as expand the use of our platform by increasing the number of users within our current customers' organizations.

## Key Components of Results of Operations

### Revenue

We generate revenue primarily through sales of subscriptions to our platform, as well as professional services. We generally sell our software on a per-user basis. We generally bill customers and collect payment for subscriptions to our platform in advance on an annual, quarterly or monthly basis. In certain instances, we have had customers pay their entire contract value up front.

Our revenue is comprised of the following:

#### *Subscriptions, Software and Support*

Subscriptions, software and support revenue is primarily derived from:

- SaaS subscriptions bundled with maintenance and support and hosting services; and
- on-premises term license subscriptions bundled with maintenance and support.

To a lesser extent, we also generate revenue from the sale of perpetual software license agreements and associated maintenance and support.

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Our maintenance and support agreements provide customers with the right to unspecified software upgrades, maintenance releases and patches released during the term of the maintenance and support agreement on a when-and-if-available basis, and rights to technical support. When our platform is deployed within a customer's own data center or private cloud, it is installed on the customer's infrastructure and offered as a term or perpetual license. When our platform is delivered as a SaaS subscription, we handle its operational needs in a third-party hosted data center.

### *Professional Services*

Our professional services revenue is comprised of fees for consulting services, including application development and deployment assistance and training related to our platform. Over time, as the need for professional services associated with user deployments decreases and the number of end users increases, we expect the mix of total revenue to shift more toward subscription revenue. We have several strategic partnerships, including with Deloitte, KPMG and PricewaterhouseCoopers. Our agreements with our strategic partners have indefinite terms and may be terminated for convenience by either party. We intend to further grow our base of strategic partners to provide broader customer coverage and solution delivery capabilities. These partners refer software subscription customers to us and perform professional services with respect to any new service contracts they originate, increasing our software subscription revenue without any change to our professional services revenue. As we expand the network of strategic partners, we expect professional services revenue to decline as a percentage of total revenue over time since our strategic partners may perform professional services associated with software subscriptions that we sell.

### **Cost of Revenue**

#### *Subscriptions, Software and Support*

Cost of subscriptions, software and support revenue consists primarily of fees paid to our third-party managed hosting providers and other third-party service providers, personnel costs, including payroll and benefits for our technology operations and customer support teams, and allocated facility costs and overhead. We expect cost of revenue to continue to increase in absolute dollars for the foreseeable future as our customer base grows.

#### *Professional Services*

Cost of professional services revenue includes all direct and indirect costs to deliver our professional services and training, including employee compensation for our global professional services and training personnel, travel costs, third-party contractor costs and allocated facility costs and overhead. The unpredictability of the timing of entering into significant professional services agreements sold on a standalone basis may cause significant fluctuations in our quarterly financial results.

### **Gross Margin**

Gross profit and gross margin, or gross profit as a percentage of total revenue, has been, and will continue to be, affected by various factors, including the mix of subscription, software and support revenue and professional services revenue. Subscription pricing, the costs associated with third-party hosting facilities, and the extent to which we expand our professional services to support future growth will impact our gross margins. Our gross margin may fluctuate from period to period based on the above factors.

*Subscriptions, Software and Support Gross Margin.* Subscriptions, software and support gross margin is primarily affected by the growth in our subscriptions, software and support revenue as compared to the growth in, and timing of, costs to support such revenue. We expect to continue to invest in the customer support and SaaS operations to support the growth in the business and the timing of those investments is expected to cause gross margins to fluctuate in the short term but improve over time.

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*Professional Services Gross Margin.* Professional services gross margin is affected by the growth in our professional services revenue as compared to the growth in, and timing of, the cost of our professional services organization as we continue to invest in the growth of our business. Professional services gross margin is also impacted by the ratable recognition of some of our professional services revenue as compared to the recognition of related costs of services in the period incurred.

### ***Operating Expenses***

Operating expenses consist of sales and marketing, research and development and general and administrative expenses. Salaries, bonuses and other personnel-related costs are the most significant components of each of these expense categories. We expect to continue to hire new employees in order to support our anticipated revenue growth. Prior to our IPO, we did not historically incur stock-based compensation expense as all outstanding options to purchase common stock as of the IPO had a vesting condition that was triggered upon a change of control transaction or an initial public offering of our common stock. In connection with the IPO, we incurred a material one-time stock-based compensation expense due to the performance condition associated with our stock options becoming probable.

#### *Sales and Marketing Expense*

Sales and marketing expense primarily includes personnel costs, including salaries, bonuses, commissions and other personnel costs related to sales teams. Additional expenses in this category include travel and entertainment, marketing and promotional events, marketing activities, subcontracting fees and allocated facility costs and overhead.

In order to continue to grow our business, geographical footprint and brand awareness, we expect to continue investing resources in sales and marketing by increasing the number of sales and account management teams. As a result, we expect sales and marketing expense to increase in absolute dollars as we continue to invest to acquire new customers and further expand usage of our platform within our existing customer base.

#### *Research and Development Expense*

Research and development expense consists primarily of personnel costs for our employees who develop and enhance our platform, including salaries, bonuses and other personnel costs. Also included are non-personnel costs such as subcontracting, consulting and professional fees to third party development resources, allocated facility costs, overhead and depreciation and amortization costs.

Our research and development efforts are focused on enhancing the speed and power of our software platform. We expect research and development expenses to continue to increase as they are critical to maintain and improve our quality of applications and our competitive position.

#### *General and Administrative Expense*

General and administrative expense consists primarily of personnel costs, including salaries, bonuses and other personnel costs for our administrative, legal, information technology, human resources, finance and accounting employees and executives. Additional expenses included in this category are non-personnel costs, such as travel-related expenses, contracting and professional fees, audit fees, tax services and legal fees, as well as insurance and other corporate expenses, along with allocated facility costs and overhead.

In February 2014, we repurchased shares of our common stock from some of our stockholders using the proceeds from a preferred stock financing. The fair value of our common stock in February 2014 was determined to be lower than the repurchase price. The difference between the repurchase price and the fair value of the common stock was recognized as compensation expense. See Note 7 to our consolidated financial statements appearing elsewhere in this prospectus for further details regarding this transaction.

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We expect our general and administrative expense to increase in absolute dollars as we continue to support our growth. We also anticipate that we will continue to incur additional costs for personnel and consulting and professional fees as a result of operating as a newly public company.

**Results of Operations**

The following table sets forth our consolidated statements of operations data:

	Year Ended December 31,			Nine Months Ended September 30 ,	
	2014	2015	2016	2016	2017
(in thousands)					
<b>Consolidated Statements of Operations Data:</b>					
Revenue:					
Subscriptions, software and support	\$ 37,076	\$ 53,207	\$ 69,972	\$ 50,607	\$ 66,116
Professional services	51,920	57,997	62,951	48,569	60,059
Total revenue	<u>88,996</u>	<u>111,204</u>	<u>132,923</u>	<u>99,176</u>	<u>126,175</u>
Cost of revenue:					
Subscriptions, software and support	4,273	6,079	7,437	5,508	6,891
Professional services	32,524	42,402	42,686	34,016	39,049
Total cost of revenue	<u>36,797</u>	<u>48,481</u>	<u>50,123</u>	<u>39,524</u>	<u>45,940</u>
Gross profit	52,199	62,723	82,800	59,652	80,235
Operating expenses:					
Sales and marketing	29,088	38,300	54,137	39,477	59,503
Research and development	13,488	16,750	22,994	16,925	25,867
General and administrative	23,373	12,515	17,039	12,779	19,721
Total operating expenses	<u>65,949</u>	<u>67,565</u>	<u>94,170</u>	<u>69,181</u>	<u>105,091</u>
Operating loss	(13,750)	(4,842)	(11,370)	(9,529)	(24,856)
Other expense (income):					
Other expense (income), net	2,086	1,579	1,792	129	(1,658)
Interest expense	19	188	982	726	451
Total other expense (income)	<u>2,105</u>	<u>1,767</u>	<u>2,774</u>	<u>855</u>	<u>(1,207)</u>
Net loss before income taxes	(15,855)	(6,609)	(14,144)	(10,384)	(23,649)
Income tax expense (benefit)	1,204	378	(1,683)	(2,106)	489
Net loss	<u>\$ (17,059)</u>	<u>\$ (6,987)</u>	<u>\$ (12,461)</u>	<u>\$ (8,278)</u>	<u>\$ (24,138)</u>

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The following table sets forth our consolidated statements of operations data expressed as a percentage of total revenue:

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
<b>Consolidated Statements of Operations Data:</b>					
Revenue:					
Subscriptions, software and support	41.7%	47.8%	52.6%	51.0%	52.4%
Professional services	58.3	52.2	47.4	49.0	47.6
Total revenue	100.0	100.0	100.0	100.0	100.0
Cost of revenue:					
Subscriptions, software and support	4.8	5.5	5.6	5.6	5.5
Professional services	36.5	38.1	32.1	34.3	30.9
Total cost of revenue	41.3	43.6	37.7	39.9	36.4
Gross margin	58.7	56.4	62.3	60.1	63.6
Operating expenses:					
Sales and marketing	32.7	34.4	40.7	39.8	47.2
Research and development	15.2	15.1	17.3	17.1	20.5
General and administrative	26.3	11.3	12.8	12.9	15.6
Total operating expenses	74.2	60.8	70.8	69.8	83.3
Operating loss	(15.5)	(4.4)	(8.5)	(9.7)	(19.7)
Other expense (income):					
Other expense (income), net	2.3	1.4	1.3	0.1	(1.3)
Interest expense	0.0	0.2	0.7	0.7	0.4
Total other expense (income)	2.3	1.6	2.0	0.8	(0.9)
Net loss before income taxes	(17.8)	(6.0)	(10.5)	(10.5)	(18.8)
Income tax expense (benefit)	1.4	0.3	(1.3)	(2.1)	0.4
Net loss	(19.2)%	(6.3)%	(9.2)%	(8.4)%	(19.2)%

### Nine Months Ended September 30, 2016 and 2017

#### Revenue

	Nine Months Ended September 30,		% Change
	2016	2017	
<b>Revenue</b>			
Subscriptions, software and support	\$50,607	\$ 66,116	30.6%
Professional services	48,569	60,059	23.7
Total revenue	<u>\$99,176</u>	<u>\$126,175</u>	27.2

Total revenue increased \$27.0 million, or 27.2%, in the nine months ended September 30, 2017 compared to the same period in 2016, due to an increase in our subscriptions, software and support revenue of \$15.5 million and an increase in our professional services revenue of \$11.5 million. The increase in subscription revenue was attributable to \$11.6 million of revenue from expanded deployments and corresponding sales of additional subscriptions to existing customers and \$3.9 million in sales of subscriptions to new customers. The increase in

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professional services revenue was due to \$11.7 million of revenue from new customers, offset by the completion of a substantial portion of a government contract during the nine months ended September 30, 2016.

### **Cost of Revenue**

	Nine Months Ended September 30,		<u>% Change</u>
	2016	2017	
	(dollars in thousands)		
Cost of revenue:			
Subscriptions, software and support	\$ 5,508	\$ 6,891	25.1%
Professional services	34,016	39,049	14.8
Total cost of revenue	<u>\$39,524</u>	<u>\$45,940</u>	16.2
Subscriptions, software and support gross margin	89.1%	89.6%	
Professional services gross margin	30.0	35.0	
Total gross margin	60.1	63.6	

Cost of revenue increased \$6.4 million, or 16.2%, in the nine months ended September 30, 2017 compared to the same period in 2016, primarily due to a \$3.7 million increase in professional services and product support staff personnel costs, a \$1.5 million increase in facility and overhead costs, a \$0.7 million increase in contractor costs and a \$0.5 million increase in other cost of revenue. Personnel costs increased due to \$1.6 million in stock-based compensation expense and an increase in the number of experienced professional services employees in the nine months ended September 30, 2017. Facility and overhead costs increased due to an increase in billable expenses. Contractor costs increased in the nine months ended September 30, 2017 compared to the same period in 2016 because of an increase in the usage of contractor resources for professional service engagements. The increase in other cost of revenue is due to increased hosting costs as sales of our cloud offering increased in the nine months ended September 30, 2017.

Gross margin increased to 63.6% in the nine months ended September 30, 2017 compared to 60.1% in the same period in 2016, due to an increase in the gross margin of our subscriptions, software and support revenue as well as our professional services revenue. Our revenue mix remained relatively constant in the nine months ended September 30, 2017 compared to the nine months ended September 30, 2016. The gross margin of our professional services revenue for the nine months ended September 30, 2016 was negatively impacted by temporarily low utilization of professional services resources as they were being redeployed after the completion of a large engagement in the second quarter of 2016.

### **Sales and Marketing Expense**

	Nine Months Ended September 30,		<u>% Change</u>
	2016	2017	
	(dollars in thousands)		
Sales and marketing	\$39,477	\$59,503	50.7%
% of revenue	39.8%	47.2%	

Sales and marketing expense increased \$20.0 million, or 50.7%, in the nine months ended September 30, 2017 compared to the same period in 2016, primarily due to a \$15.0 million increase in sales and marketing personnel costs, a \$2.9 million increase in facility and overhead costs, a \$1.8 million increase in marketing costs and a \$0.3 million increase in professional fees. Personnel costs increased due to \$2.8 million in stock-based compensation expense during the nine months ended September 30, 2017, an increase in sales and marketing

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personnel headcount by 27.6% from September 30, 2016 to September 30, 2017 and increased sales commissions driven by our revenue growth. Facility and overhead costs increased to support our personnel growth. Marketing costs increased due to a rise in marketing event sponsorship and attendance. Professional fees increased due to an increase in consulting fees.

### *Research and Development Expense*

	Nine Months Ended September 30,		% Change
	2016	2017	
	(dollars in thousands)		
Research and development	\$ 16,925	\$ 25,867	52.8%
% of revenue	17.1%	20.5%	

Research and development expense increased \$8.9 million, or 52.8%, in the nine months ended September 30, 2017 compared to the same period in 2016, primarily due to a \$8.4 million increase in research and development personnel costs and a \$0.6 million increase in facility and overhead costs, offset by \$0.1 million decrease in consulting fees. Personnel costs increased due to \$2.5 million in stock-based compensation expense during the nine months ended September 30, 2017 and an increase in research and development personnel headcount by 32.4% from September 30, 2016 to September 30, 2017. Facility and overhead costs increased to support our personnel growth. Consulting fees decreased as we continued to hire additional internal research and development personnel.

### *General and Administrative Expense*

	Nine Months Ended September 30,		% Change
	2016	2017	
	(dollars in thousands)		
General and administrative expense	\$ 12,779	\$ 19,721	54.3%
% of revenue	12.9%	15.6%	

General and administrative expense increased \$6.9 million, or 54.3%, in the nine months ended September 30, 2017 compared to the same period in 2016, primarily due to a \$5.5 million increase in general and administrative personnel costs, a \$0.6 million increase in professional fees, a \$0.5 million increase in facility and overhead costs and a \$0.3 million increase in legal costs. Personnel costs increased due to \$4.1 million in stock-based compensation expense during the nine months ended September 30, 2017 and an increase in general and administrative personnel headcount by 13.4% from September 30, 2016 to September 30, 2017. Facility and overhead costs as well as contractor costs increased to support our personnel growth. Legal costs increased due to the settlement of certain legal matters during the nine months ended September 30, 2017.

## **Years Ended December 31, 2014, 2015 and 2016**

### *Revenue*

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
Revenue:					
Subscriptions, software and support	\$37,076	\$ 53,207	\$ 69,972	43.5%	31.5%
Professional services	51,920	57,997	62,951	11.7	8.5
Total revenue	<u>\$88,996</u>	<u>\$111,204</u>	<u>\$132,923</u>	25.0	19.5

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*2016 Compared to 2015.* Total revenue increased \$21.7 million, or 19.5%, in 2016 compared to 2015, due to an increase in our subscriptions revenue of \$16.8 million and an increase in our professional services revenue of \$4.9 million. The increase in subscription revenue was attributable to \$11.0 million of revenue from expanded deployments and corresponding sales of additional subscriptions to existing customers and \$5.8 million in sales of subscriptions to new customers. The increase in professional services revenue was due to increased application development and deployment assistance demands from our customers.

*2015 Compared to 2014.* Total revenue increased \$22.2 million, or 25.0%, in 2015 compared to 2014, due to an increase in our subscriptions revenue of \$16.1 million and an increase in our professional services revenue of \$6.1 million. The increase in subscription revenue was attributable to \$12.2 million of revenue from expanded deployments and corresponding sales of additional subscriptions to existing customers and \$3.9 million in sales of subscriptions to new customers. The increase in professional services revenue was due to increased application development and deployment assistance demands from our customers.

### **Cost of Revenue**

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
Cost of revenue					
Subscriptions, software and support	\$ 4,273	\$ 6,079	\$ 7,437	42.3%	22.3%
Professional services	32,524	42,402	42,686	30.4	0.7
Total cost of revenue	<u>\$36,797</u>	<u>\$48,481</u>	<u>\$50,123</u>	31.8	3.4
Subscriptions, software and support gross margin	88.5%	88.6%	89.4%		
Professional services gross margin	37.4	26.9	32.2		
Total gross margin	58.7	56.4	62.3		

*2016 Compared to 2015.* Cost of revenue increased \$1.6 million, or 3.4%, in 2016 compared to 2015, primarily due to a \$5.8 million increase in professional services and product support staff personnel costs and a \$1.2 million increase in facility and overhead costs, offset by decreases in contractor costs of \$5.4 million. Personnel costs increased due to the increase in professional services and customer support staff personnel headcount by 4.6% from the end of 2015 to the end of 2016. Facility and overhead costs increased to support our personnel growth. Contractor costs decreased from 2015 to 2016 as we incurred additional contractor costs in 2015 to support a new customer contract.

Gross margin increased to 62.3% in 2016 compared to 56.4% in 2015, due primarily to an increase in the gross margin for our professional services. During 2015, we incurred increased contractor costs to support a new customer contract. Professional services gross margin increased in 2016 due to a reduction in our contractor costs of \$5.4 million as compared to 2015 as we continued to hire additional internal professional services personnel.

*2015 Compared to 2014.* Cost of revenue increased \$11.7 million, or 31.8%, in 2015 compared to 2014, primarily due to a \$4.6 million increase in professional services and support staff personnel costs, \$4.7 million increase in contractor costs, \$1.5 million increase in facility and overhead costs, and \$0.8 million in increased cloud support costs. Personnel costs increased due to the increase in professional services and customer support staff personnel headcount by 32.8% from the end of 2014 to the end of 2015. Facility and overhead costs increased to support our personnel growth. Contractor costs increased as we incurred additional contractor costs in 2015 to support a new customer contract. Cloud support costs increased to support our additional sales activity.

Gross margin decreased to 56.4% in 2015 compared to 58.7% in 2014, due primarily to a reduction in the gross margin for our professional services. Professional services gross margin decreased in 2015 due to a temporary increase in contractor costs of \$4.7 million to support a new customer contract.



**Sales and Marketing Expense**

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
Sales and marketing	\$29,088	\$38,300	\$54,137	31.7%	41.3%
% of revenue	32.7%	34.4%	40.7%		

*2016 Compared to 2015.* Sales and marketing expense increased \$15.8 million, or 41.3%, in 2016 compared to 2015, primarily due to a \$9.8 million increase in sales and marketing personnel costs, \$3.3 million increase in facility and overhead costs, and \$2.3 million increase in marketing costs. Personnel costs increased due to the increase in sales and marketing personnel headcount by 46.0% from the end of 2015 to the end of 2016 and increased sales commissions driven by our revenue growth. Facility and overhead costs increased to support our personnel growth. Marketing costs increased due to a rise in marketing event sponsorship and attendance.

*2015 Compared to 2014.* Sales and marketing expense increased \$9.2 million, or 31.7%, in 2015 compared to 2014, primarily due to a \$6.8 million increase in sales and marketing personnel costs, \$2.5 million increase in facility and overhead costs, and \$1.5 million increase in marketing costs, offset by a \$1.1 million decrease in compensation costs and \$0.5 million decrease in contractor costs. Personnel costs increased due to the increase in sales and marketing personnel headcount by 23.5% from the end of 2014 to the end of 2015 and increased sales commissions driven by our revenue growth. Facility and overhead costs increased to support our personnel growth. Marketing costs increased due to a rise in marketing event sponsorship and attendance. We recorded \$1.1 million of compensation expense for sales and marketing personnel in 2014 related to the stock repurchase transaction described above, which did not recur in 2015. Contractor costs decreased in 2015 as we continued to hire additional internal marketing personnel.

**Research and Development Expense**

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
Research and development	\$13,488	\$16,750	\$22,994	24.2%	37.3%
% of revenue	15.2%	15.1%	17.3%		

*2016 Compared to 2015.* Research and development expense increased \$6.2 million, or 37.3%, in 2016 compared to 2015, primarily due to a \$4.7 million increase in research and development personnel costs and \$1.4 million increase in facility and overhead costs. Personnel costs increased due to the increase in research and development personnel headcount by 41.7% from the end of 2015 to the end of 2016. Facility and overhead costs increased to support our personnel growth.

*2015 Compared to 2014.* Research and development expense increased \$3.3 million, or 24.2%, in 2015 compared to 2014, primarily due to a \$3.5 million increase in personnel costs, offset by a \$0.3 million decrease in contractor costs. Personnel costs increased due to the increase in research and development personnel headcount by 19.8% from the end of 2014 to the end of 2015. Contractor costs decreased in 2015 as we continued to hire additional internal research and development personnel.

**General and Administrative Expense**

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
General and administrative	\$23,373	\$12,515	\$17,039	(46.5)%	36.1%
% of revenue	26.3%	11.3%	12.8%		

*2016 Compared to 2015.* General and administrative expense increased \$4.5 million, or 36.1%, in 2016 compared to 2015, primarily due to a \$2.5 million increase in general and administrative personnel costs, \$1.1 million increase in facility and overhead costs, and \$0.9 million in increased professional services costs. Personnel costs increased due to the increase in general and administrative personnel headcount by 32.3% from the end of 2015 to the end of 2016. Facility and overhead costs as well as contractor costs increased to support our personnel growth.

*2015 Compared to 2014.* General and administrative expense decreased \$10.9 million, or 46.5%, in 2015 compared to 2014, primarily due to a \$13.0 million decrease in compensation costs, offset by a \$1.1 million increase in general and administrative personnel costs, \$0.6 million increase in contractor costs and a \$0.4 million increase in facility and overhead costs. We recorded \$13.0 million of compensation expense for general and administrative personnel in 2014 related to the stock repurchase transaction described above, which did not recur in 2015. Personnel costs increased due to the increase in general and administrative personnel headcount by 22.6% from the end of 2014 to the end of 2015. Facility and overhead costs as well as contractor costs increased to support our personnel growth.

**Other Expense**

	Year Ended December 31,			% Change	
	2014	2015	2016	2015 vs. 2014	2016 vs. 2015
	(dollars in thousands)				
Other expense, net	\$2,086	\$1,579	\$1,792	(24.3)%	13.5%
% of revenue	2.3%	1.4%	1.3%		
Interest expense	\$ 19	\$ 188	\$ 982	NM	NM
% of revenue	0.0%	0.2%	0.7%		

NM —not meaningful

*2016 Compared to 2015.* Other expense, net increased \$0.2 million, or 13.5%, in 2016 compared to 2015, primarily due to an increase in realized and unrealized foreign currency transaction losses of \$0.2 million. Interest expense increased \$0.8 million in 2016 compared to 2015, primarily as a result of additional term loan borrowings in January 2016.

*2015 Compared to 2014.* Other expense, net decreased \$0.5 million, or 24.3%, in 2015 compared to 2014, primarily due to a decrease in realized and unrealized foreign currency transaction losses of \$0.4 million. Interest expense increased \$0.2 million in 2015 compared to 2014, primarily due to the term loan originated in June 2015.

**Quarterly Results of Operations**

The following tables set forth unaudited quarterly statements of operations data for each of the eleven quarters in the period ended September 30, 2017. The information for each of these quarters has been prepared on the same basis as the audited annual consolidated financial statements included elsewhere in this prospectus and, in the opinion of management, includes all adjustments, which consist only of normal recurring adjustments,

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necessary for the fair presentation of the results of operations for these periods. This data should be read in conjunction with our audited consolidated financial statements and related notes included elsewhere in this prospectus. These quarterly results are not necessarily indicative of our operating results to be expected for 2017 or for any future period.

	Three Months Ended										
	Mar. 31, 2015	Jun. 30, 2015	Sep. 30, 2015	Dec. 31, 2015	Mar. 31, 2016	Jun. 30, 2016	Sep. 30, 2016	Dec. 31, 2016	Mar. 31, 2017	Jun. 30, 2017	Sep. 30, 2017
(in thousands)											
<b>Consolidated Statements of Operations Data:</b>											
Revenue:											
Subscriptions, software and support	\$ 10,887	\$ 13,161	\$ 13,922	\$ 15,237	\$ 15,618	\$ 17,321	\$ 17,668	\$ 19,365	\$ 21,444	\$ 22,012	\$ 22,660
Professional services	12,225	14,432	16,224	15,116	20,346	15,146	13,077	14,382	16,885	21,186	21,988
Total revenue	<u>23,112</u>	<u>27,593</u>	<u>30,146</u>	<u>30,353</u>	<u>35,964</u>	<u>32,467</u>	<u>30,745</u>	<u>33,747</u>	<u>38,329</u>	<u>43,198</u>	<u>44,648</u>
Cost of revenue:											
Subscriptions, software and support	1,214	1,490	1,732	1,643	1,782	1,836	1,890	1,929	2,062	2,488	2,341
Professional services	8,650	10,346	11,531	11,875	12,978	11,723	9,315	8,670	10,628	14,149	14,272
Total cost of revenue	<u>9,864</u>	<u>11,836</u>	<u>13,263</u>	<u>13,518</u>	<u>14,760</u>	<u>13,559</u>	<u>11,205</u>	<u>10,599</u>	<u>12,690</u>	<u>16,637</u>	<u>16,613</u>
Gross profit	13,248	15,757	16,883	16,835	21,204	18,908	19,540	23,148	25,639	26,561	28,035
Operating expenses:											
Sales and marketing	8,622	10,100	10,010	9,568	11,166	13,831	14,480	14,660	17,003	22,775	19,725
Research and development	3,694	3,967	4,698	4,391	4,927	5,296	6,702	6,069	7,300	9,971	8,596
General and administrative	3,146	3,061	3,256	3,052	3,930	4,318	4,531	4,260	4,849	8,635	6,237
Total operating expenses	<u>15,462</u>	<u>17,128</u>	<u>17,964</u>	<u>17,011</u>	<u>20,023</u>	<u>23,445</u>	<u>25,713</u>	<u>24,989</u>	<u>29,152</u>	<u>41,381</u>	<u>34,558</u>
Operating (loss) income	(2,214)	(1,371)	(1,081)	(176)	1,181	(4,537)	(6,173)	(1,841)	(3,513)	(14,820)	(6,523)
Other expense (income):											
Other expense (income), net	1,083	(685)	669	512	(537)	733	(67)	1,663	(499)	(734)	(425)
Interest expense	—	—	74	114	242	241	243	256	256	197	(2)
Total other expense (income)	<u>1,083</u>	<u>(685)</u>	<u>743</u>	<u>626</u>	<u>(295)</u>	<u>974</u>	<u>176</u>	<u>1,919</u>	<u>(243)</u>	<u>(537)</u>	<u>(427)</u>
Net (loss) income before income taxes	(3,297)	(686)	(1,824)	(802)	1,476	(5,511)	(6,349)	(3,760)	(3,270)	(14,283)	(6,096)
Income tax (benefit) expense	(103)	509	(144)	116	721	(1,217)	(1,610)	423	125	176	188
Net (loss) income	<u>\$ (3,194)</u>	<u>\$ (1,195)</u>	<u>\$ (1,680)</u>	<u>\$ (918)</u>	<u>\$ 755</u>	<u>\$ (4,294)</u>	<u>\$ (4,739)</u>	<u>\$ (4,183)</u>	<u>\$ (3,395)</u>	<u>\$ (14,459)</u>	<u>\$ (6,284)</u>

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	Three Months Ended										
	Mar. 31, 2015	Jun. 30, 2015	Sep. 30, 2015	Dec. 31, 2015	Mar. 31, 2016	Jun. 30, 2016	Sep. 30, 2016	Dec. 31, 2016	Mar. 31, 2017	Jun. 30, 2017	Sep. 30, 2017
(as a percentage of total revenue)											
<b>Consolidated Statements of Operations Data:</b>											
Revenue:											
Subscriptions, software and support	47.1%	47.7%	46.2%	50.2%	43.4%	53.3%	57.5%	57.4%	55.9%	51.0%	50.8%
Professional services	52.9	52.3	53.8	49.8	56.6	46.7	42.5	42.6	44.1	49.0	49.2
Total revenue	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Cost of revenue:											
Subscriptions, software and support	5.3	5.4	5.7	5.4	5.0	5.7	6.1	5.7	5.4	5.8	5.2
Professional services	37.4	37.5	38.3	39.1	36.1	36.1	30.3	25.7	27.7	32.7	32.0
Total cost of revenue	42.7	42.9	44.0	44.5	41.1	41.8	36.4	31.4	33.1	38.5	37.2
Gross margin	57.3	57.1	56.0	55.5	58.9	58.2	63.6	68.6	66.9	61.5	62.8
Operating expenses:											
Sales and marketing	37.3	36.6	33.2	31.5	31.0	42.6	47.1	43.4	44.4	52.7	44.2
Research and development	16.0	14.4	15.6	14.5	13.7	16.3	21.8	18.0	19.0	23.1	19.3
General and administrative	13.6	11.1	10.8	10.1	10.9	13.3	14.7	12.6	12.7	20.0	14.0
Total operating expenses	66.9	62.1	59.6	56.1	55.6	72.2	83.6	74.0	76.1	95.8	77.5
Operating (loss) income	(9.6)	(5.0)	(3.6)	(0.6)	3.3	(14.0)	(20.0)	(5.4)	(9.2)	(34.3)	(14.7)
Other expense (income):											
Other expense (income), net	4.7	(2.5)	2.2	1.7	(1.5)	2.3	(0.2)	4.9	(1.3)	(1.7)	(1.0)
Interest expense	—	—	0.2	0.4	0.7	0.7	0.8	0.8	0.7	0.5	—
Total other expense (income)	4.7	(2.5)	2.4	2.1	(0.8)	3.0	0.6	5.7	(0.6)	(1.2)	(1.0)
Net (loss) income before income taxes	(14.3)	(2.5)	(6.0)	(2.7)	4.1	(17.0)	(20.6)	(11.1)	(8.6)	(33.1)	(13.7)
Income tax (benefit) expense	(0.4)	1.8	(0.5)	0.4	2.0	(3.7)	(5.2)	1.3	0.3	0.4	0.4
Net (loss) income	(13.9)%	(4.3)%	(5.5)%	(3.1)%	2.1%	(13.3)%	(15.4)%	(12.4)%	(8.9)%	(33.5)%	(14.1)%

### Quarterly Revenue Trend

Our quarterly subscriptions, software and support revenue increased sequentially for all periods presented due primarily to increases in the number of new customers and expanded relationships with existing customers. While professional services revenue increased on an annual basis, in some cases, revenue for professional services decreased period over period. The sequential decrease in professional services revenue for the three months ended June 30, 2016 reflected the completion of a substantial portion of a major government customer contract in the three months ended March 31, 2016. The sequential decrease in professional services revenue for the three months ended September 30, 2016 reflected the completion of additional work under that same customer contract in the three months ended June 30, 2016.

### ***Quarterly Cost and Expense Trend***

The sequential decrease in cost of revenue for the three months ended June 30, 2016 reflected a decrease in contracted labor costs due to the completion of a substantial portion of a major customer contract in the three months ended March 31, 2016. The sequential decrease in cost of revenue for the three months ended September 30, 2016 and December 31, 2016 reflected a decrease in contracted labor costs due to the completion of additional work under the same major customer contract in the three months ended June 30, 2016. The sequential decrease in cost of revenue for the three months ended December 31, 2016 also reflected lower personnel costs due to bonus achievements in the prior quarter.

Sales and marketing, research and development, and general and administrative expenses generally have increased sequentially over the periods presented as we increased our headcount to support the continued investment in our platform and our growth. The sequential decrease in sales and marketing expense for the three months ended December 31, 2015 reflected lower commission payments. The sequential increase in research and development costs for the three months ended September 30, 2016 reflected an increase in personnel costs due to additional headcount, as well as the cost of a summer intern program. The sequential decrease in research and development costs for the three months ended December 31, 2016 reflected lower personnel costs due to bonus achievements in the prior quarter and lower facility and overhead costs. The sequential increase in general and administrative costs for the three months ended March 31, 2016 reflected increased compensation expense related to expected bonus achievement. The sequential decrease in general and administrative costs for the three months ended December 31, 2016 reflected lower personnel costs due to bonus achievements in the prior quarter.

The sequential increase in other expense, net for the three months ended December 31, 2016 reflected an increase in unrealized foreign currency transaction losses from the prior quarter.

### ***Seasonality***

We have historically experienced seasonality in terms of when we enter into agreements with customers. We typically enter into a significantly higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in the fourth quarter and, to a lesser extent, the second quarter. The increase in customer agreements for the fourth quarter is attributable to large enterprise account buying patterns typical in the software industry. However, we recognize substantially all of our revenue ratably over the terms of our subscription agreements, which generally occurs over a one to five-year period. As a result, a substantial portion of the revenue that we report in each period will be derived from the recognition of deferred revenue relating to agreements entered into during previous periods. Consequently, a decline in new sales or renewals in any one period may not be immediately reflected in our revenue results for that period. This decline, however, will negatively affect our revenue in future periods. Accordingly, the effect of significant downturns in sales and market acceptance of our platform and potential changes in our rate of renewals may not be fully reflected in our results of operations until future periods.

### ***Backlog***

Backlog represents future amounts to be invoiced under subscription agreements. As of December 31, 2015 and 2016, we had backlog of approximately \$111 million and \$167 million, respectively. Approximately 52% of our backlog as of December 31, 2016 is not expected to be filled in 2017.

We often sign multiple-year subscription agreements. The timing of invoices to customers is a negotiated term and thus varies among our subscription agreements. For multiple-year agreements, it is common to invoice an initial quarterly or annual amount at contract signing followed by subsequent quarterly or annual invoices. At any point in the contract term, there can be amounts that we have not yet been contractually able to invoice. Until such time as we have the contractual right to invoice, these amounts are not recorded in deferred revenue or elsewhere in our consolidated financial statements, and are considered by us to be backlog.

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We expect that the amount of backlog relative to the total value of our contracts will change from quarter to quarter and year to year for several reasons, including the amount invoiced early in the contract term, the specific timing and duration of large customer subscription agreements, varying invoicing cycles of subscription agreements, the specific timing of customer renewals, changes in customer financial circumstances and foreign currency fluctuations.

Backlog may also vary based on changes in the average non-cancellable term of subscription agreements. The change in backlog that results from changes in the average non-cancellable term of subscription agreements may not be an indicator of the likelihood of renewal or expected future revenue. Accordingly, we believe that fluctuations in backlog are not a reliable indicator of future revenue, and we do not utilize backlog as a key management metric internally.

### **Liquidity and Capital Resources**

As of September 30, 2017, we had \$72.3 million of cash and cash equivalents. On May 31, 2017, we closed our IPO of 7,187,500 shares of our Class A common stock at an offering price of \$12.00 per share, including 937,500 shares pursuant to the underwriters' option to purchase additional Class A shares, resulting in net proceeds to us of \$77.8 million, after deducting underwriting discounts and commissions of \$6.0 million and offering expenses of \$2.4 million.

We believe that existing cash and cash equivalents, any positive cash flows from operations and available borrowings under our credit facilities will be sufficient to support working capital and capital expenditure requirements for at least the next 12 months. Since inception, we have financed operations primarily through sales of software and professional services, borrowings under our credit facilities, and to a lesser degree, the sale of equity securities. Our principal uses of cash are funding operations and capital expenditures. We can currently repatriate any cash held by our international subsidiaries without a tax impact.

#### **Sources of Funds**

##### *2015 Line of Credit*

At December 31, 2015, we had a \$10.0 million revolving line of credit with a lender, expiring in June 2016, which was subsequently amended in June 2016 to extend the maturity date through June 2017, and which was terminated in April 2017. The amount of borrowing available under the credit facility at any time could not exceed 80% of eligible accounts receivable at such time and any amounts borrowed were collateralized by substantially all of our assets. Amounts drawn on the revolving line of credit accrued interest at a floating rate of prime plus 0.75%. The agreement contained certain affirmative covenants related to the timely delivery of financial information to the lender and maintaining a liquidity ratio of at least 1.25 to 1, as well as certain customary negative covenants.

##### *2015 Term Loan*

In March 2015, we entered into a collateralized \$10.0 million term loan facility with a lender, maturing in March 2019 and borrowed the full amount under the term loan facility in June 2015. In January 2016, we paid off the outstanding balance of the term loan and simultaneously entered into a \$20.0 million term loan facility with the lender, maturing in January 2020. We borrowed the full amount under the term loan facility in January 2016, which we repaid in full in April 2017.

Interest on the term loan borrowings accrued at a floating rate equal to the prime rate plus 1.25%. Initially, the first 12 months were to require interest-only payments followed by 36 months of monthly amortization payments. In contemplation of the new financing facility described below, the interest-only period was extended until the new financing facility was finalized. We were permitted to pay off the entire term loan at any time by

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paying all outstanding principal, accrued interest, and a prepayment fee of 1% of the amount advanced through month 12, 0.5% during months 13 through 24 and no prepayment fee thereafter. The term loan included a financial covenant related to our short-term liquidity.

### *2017 Financing Facility*

In April 2017, we entered into a new financing facility consisting of a \$5.0 million senior revolving credit facility, a \$20.0 million senior term loan and a \$10.0 million subordinated term loan. In connection with the execution of this financing facility, the prior line of credit was terminated, and we borrowed the full \$20.0 million available under the senior term loan and repaid the outstanding balance under our prior term loan. Additionally, in connection with the execution of our new financing facility, the lender waived the prepayment fee associated with our prior line of credit.

Amounts drawn on the senior revolving credit facility bore interest at a floating rate equal to the prime rate plus 0.75%. The facility matured in April 2019, contained covenants related to our short-term liquidity and was collateralized by all of our assets.

Borrowings under the senior term loan bore interest at a floating rate equal to the prime rate plus 1.25%. Borrowings were required to be repaid over 48 months, consisting of 12 months of interest-only payments followed by 36 months of principal and interest payments. We could pay off the entire senior term loan at any time by paying all outstanding principal, accrued interest, and a prepayment fee of 2% of the amount borrowed if repaid through month 12, 1% of the amount borrowed if repaid during months 13 through 24 and no prepayment fee if repaid thereafter. The senior term loan included a financial covenant related to our short-term liquidity and was collateralized by all of our assets.

Borrowings under the subordinated term loan bore interest at an initial rate of 11%, which increased by 1% upon each anniversary of the closing date of the financing facility. The facility matured in April 2020. Interest-only payments were required through maturity, and the principal balance was due upon maturity. We were able to borrow amounts under the subordinated term loan within the first 12 months after closing. We could pay off the entire subordinated term loan at any time by paying all outstanding principal, accrued interest, and a final payment fee of 5% of the amount borrowed if repaid through month 12, 6% of the amount borrowed if repaid during months 13 through 24 and 7% of the amount borrowed if repaid thereafter. The subordinated term loan also carried an unused facility fee of 1.5% of the unused portion of the subordinated term loan, which was payable quarterly. The subordinated term loan included a financial covenant related to our recurring revenue and was collateralized by all of our assets.

In June 2017, we used proceeds from our IPO to pay all remaining outstanding principal and interest under the senior term loan and subsequently terminated the senior term loan and subordinated term loan. In connection with the repayment of the senior term loan, we recognized a loss on extinguishment of debt of \$0.4 million related to unamortized debt issuance costs, which is included within other (income) expense, net in the accompanying condensed consolidated statements of operations. As of September 30, 2017, we had no outstanding borrowings. This financing facility was terminated in November 2017 in connection with our entry into a new \$20.0 million revolving line of credit.

### *2017 Line of Credit*

In November 2017, we entered into a \$20.0 million revolving line of credit with a lender. The facility matures in November 2022. We may elect whether amounts drawn on the revolving line of credit bear interest at a floating rate per annum equal to either the LIBOR or the prime rate plus an additional interest rate margin that is determined by the availability of borrowings under the revolving line of credit. The additional interest rate margin will range from 2.00% to 2.50% in the case of LIBOR advances and from 1.00% to 1.50% in the case of prime rate advances. The revolving line of credit contains an unused facility fee in an amount between 0.15% and 0.25% of the average unused portion of the revolving line of credit, which is payable quarterly. The agreement contains certain customary affirmative and negative covenants and requires us to maintain (i) an adjusted quick

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ratio of at least 1.35 to 1.0 and (ii) minimum adjusted EBITDA, in the amounts and for the periods set forth in the agreement. Any amounts borrowed under the credit facility are collateralized by substantially all of our assets. We were in compliance with all covenants as of November 1, 2017. As of November 13, 2017, we had no outstanding borrowings under the revolving line of credit.

### ***Use of Funds***

Our principal uses of cash are funding operations and other working capital requirements. Over the past several years, revenue has increased significantly from year to year and, as a result, cash flows from customer collections have increased. However, operating expenses have also increased as we have invested in growing our business. Our operating cash requirements may increase in the future as we continue to invest in the strategic growth of our company.

### ***Cash and Cash Equivalents and Working Capital***

The following table summarizes our cash and cash equivalents and working capital, a U.S. GAAP measure defined as current assets minus current liabilities:

	As of December 31,		As of
	2015	2016	September 30, 2017
Cash and cash equivalents	\$31,393	\$31,143	\$ 72,289
Working capital	19,463	12,365	51,539

Our cash and cash equivalents as of September 30, 2017 were available for working capital purposes. We do not enter into investments for trading purposes, and our investment policy is to invest any excess cash in short-term, highly liquid investments that limit the risk of principal loss; therefore, our cash is held in demand deposit accounts that generate very low returns.

We believe our existing cash and our future cash flows from operating activities will be sufficient to meet our anticipated cash needs for at least the next 12 months. Over the next twelve months, we expect our capital expenditure requirements to be approximately \$0.5 million to \$1.5 million. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support research and development efforts, the continued expansion of sales and marketing activities, the introduction of new functions and platform enhancements, and the continued market acceptance of our applications. To the extent existing cash and cash equivalents and investments and cash from operations are not sufficient to fund future activities, we may need to raise additional funds. We may seek to raise additional funds through equity, equity-linked or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness may have rights that are senior to holders of our equity securities and could contain covenants that restrict operations. Any additional equity financing may be dilutive to our existing stockholders. Although we are not currently a party to any agreement or letter of intent with respect to potential investments in, or acquisitions of, complementary businesses, services or technologies, we may enter into these types of arrangements in the future, which could also require us to seek additional equity financing, incur indebtedness, or use cash resources. We have no present understandings, commitments or agreements to enter into any such acquisitions.

### ***Historical Cash Flows***

The following table shows a summary of our cash flows:

	Year Ended December 31,			Nine Months Ended September 30,	
	2014	2015	2016	2016	2017
Net cash provided by (used in) operating activities	\$ 1,534	\$ (2,145)	\$ (7,756)	\$ (7,815)	\$ (10,135)
Net cash used in investing activities	(2,633)	(524)	(984)	(935)	(295)
Net cash provided by financing activities	16,367	10,000	10,000	10,000	50,504



*Operating Activities*

For the nine months ended September 30, 2017, net cash used in operating activities of \$10.1 million consisted of a net loss of \$24.1 million, offset by \$12.2 million in adjustments for non-cash items and \$1.8 million of cash provided by changes in working capital. Adjustments for non-cash items consisted of stock-based compensation of \$10.9 million, depreciation and amortization expense of \$0.7 million, loss on extinguishment of debt of \$0.4 million and fair value adjustment for the warrant liability of \$0.3 million, offset by a provision for deferred income taxes of \$0.1 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of a \$4.3 million decrease in accounts receivable, primarily due to the timing of billings, an increase in accounts payable and accrued expenses of \$1.2 million and an increase in deferred revenue of \$1.0 million, as a result of increased subscription sales. This increase was partially offset by a \$3.2 million increase in prepaid expenses and other assets, a \$1.0 million increase in deferred commissions due to increased sales, a \$0.3 million decrease in accrued compensation and related benefits, primarily due to the timing of year-end bonus payments and a \$0.2 million decrease in other liabilities.

For the nine months ended September 30, 2016, net cash used in operating activities of \$7.8 million consisted of a net loss of \$8.3 million and \$0.1 million in adjustments for non-cash items, offset by \$0.6 million of cash provided by changes in working capital. Adjustments for non-cash items consisted of a provision for deferred income taxes of \$0.9 million, offset by depreciation and amortization expense of \$0.6 million and fair value adjustment for the warrant liability of \$0.2 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of a decrease in accounts receivable of \$6.2 million, primarily due to the timing of billings, a \$1.6 million increase in accrued compensation and related benefits as a result of our increasing headcount and a \$0.4 million increase in deferred revenue as a result of increased subscription sales. This increase was partially offset by a \$2.9 million decrease in accounts payable and accrued expenses, an increase in prepaid expenses and other assets of \$2.4 million, an increase in deferred commissions of \$1.4 million due to increased sales and a \$0.9 million decrease in other liabilities.

For the year ended December 31, 2016, our net cash used in operating activities of \$7.8 million consisted of a net loss of \$12.5 million and \$0.2 million in adjustments for non-cash items, partially offset by \$4.9 million of cash provided by changes in working capital. Adjustments for non-cash items primarily consisted of a provision for deferred income taxes of \$1.1 million, partially offset by depreciation and amortization expense of \$0.8 million and a fair value adjustment for our warrant liability of \$0.2 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of an increase in deferred revenue of \$17.4 million as a result of increased subscription sales and a \$3.7 million increase in accrued compensation and related benefits as a result of our increasing headcount. These increases were partially offset by an \$11.2 million increase in accounts receivable, primarily due to the timing of billings and a higher level of sales, and a \$5.3 million increase in deferred commissions.

For the year ended December 31, 2015, our net cash used in operating activities of \$2.1 million consisted of a net loss of \$7.0 million, partially offset by \$4.1 million of cash provided by changes in working capital and \$0.8 million in adjustments for non-cash items. Adjustments for non-cash items primarily consisted of depreciation and amortization expense of \$0.8 million and a fair value adjustment for our warrant liability of \$0.3 million, partially offset by a provision for deferred income taxes of \$0.3 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of an increase in deferred revenue of \$15.5 million as a result of increased subscription sales, partially offset by a \$6.6 million increase in accounts receivable, primarily due to the timing of billings and a higher level of sales, and a \$4.0 million increase in deferred commissions.

For the year ended December 31, 2014, our net cash provided by operating activities of \$1.5 million consisted of a net loss of \$17.1 million, offset by \$17.2 million of cash provided by changes in working capital and \$1.4 million in adjustments for non-cash items. Adjustments for non-cash items primarily consisted of depreciation and amortization expense of \$0.6 million, a fair value adjustment for our warrant liability of \$0.4 million, and a provision for deferred income taxes of \$0.4 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of an increase in deferred revenue of \$16.7 million as a result of increased subscription sales.

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### *Investing Activities*

For the nine months ended September 30, 2017 and 2016, net cash used in investing activities was \$0.3 million and \$0.9 million, respectively, for the purchase of property and equipment.

For the years ended December 31, 2014, 2015 and 2016, net cash used in investing activities was \$2.6 million, \$0.5 million and \$1.0 million, respectively, for the purchase of property and equipment.

### *Financing Activities*

For the nine months ended September 30, 2017, net cash provided by financing activities was \$50.5 million, consisting of \$80.2 million in proceeds from our IPO, net of underwriting discounts, \$19.6 million in proceeds from the issuance of long-term debt, net of issuance costs, and \$0.7 million in proceeds received from stock option exercises. These increases were offset by the repayment of \$40.0 million of long-term debt, a \$7.6 million dividend payment to the Series A preferred stockholders and the payment of deferred IPO costs of \$2.4 million. For the nine months ended September 30, 2016, net cash provided by financing activities was \$10.0 million, consisting of \$20.0 million in net borrowings under our term loan, partially offset by \$10.0 million in repayments of debt.

For the year ended December 31, 2016, net cash provided by financing activities was \$10.0 million, consisting of \$20.0 million in net borrowings under our term loan, partially offset by \$10.0 million in repayments of debt.

For the year ended December 31, 2015, net cash provided by financing activities was \$10.0 million, consisting of \$10.0 million in net borrowings under our term loan.

For the year ended December 31, 2014, net cash provided by financing activities was \$16.4 million, consisting of \$37.4 million in net proceeds from the issuance of our Series B convertible preferred stock, partially offset by \$21.0 million in repurchases of our common stock from existing stockholders.

## **Contractual Obligations and Commitments**

The following table summarizes our commitments to settle contractual obligations at December 31, 2016:

	Payments Due By Period				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
(in thousands)					
Debt <sup>(1)</sup> :					
Principal payments	\$20,000	\$ 6,111	\$13,333	\$ 556	\$ —
Interest payments	1,463	785	675	3	—
Operating lease commitments	29,090	7,145	13,395	7,246	1,304
Purchase obligations <sup>(2)</sup>	1,650	330	660	660	—
Total contractual obligations	<u>\$52,203</u>	<u>\$ 14,371</u>	<u>\$28,063</u>	<u>\$ 8,465</u>	<u>\$ 1,304</u>

(1) As described under “Liquidity and Capital Resources” above, in April 2017, we entered into a new financing facility that modified the dates of these obligations. In June 2017, we used proceeds from our IPO to pay all remaining outstanding principal and interest under the senior term loan and subsequently terminated the senior term loan and subordinated term loan.

(2) We have annual royalty fees of \$0.3 million for a non-cancellable agreement for the use of technology that is integral in the development of our software. No amounts were included in the “More than 5 Years” column as this agreement is perpetual and will be required as long as we continue to use the technology.

The commitment amounts in the table above are associated with contracts that are enforceable and legally binding and that specify all significant terms, including fixed or minimum services to be used, fixed, minimum or variable price provisions, and the approximate timing of the actions under the contracts. The table does not include obligations under agreements that we can cancel without a significant penalty.

## **Off-Balance Sheet Arrangements**

As of September 30, 2017, we did not have any relationships with unconsolidated entities or financial partnerships, including entities sometimes referred to as structured finance or special purpose entities that were established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. We do not engage in off-balance sheet financing arrangements. In addition, we do not engage in trading activities involving non-exchange traded contracts. We therefore believe that we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

## **Critical Accounting Policies**

We believe that the following accounting policies involve a high degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of our operations. See note 2 to our consolidated financial statements appearing elsewhere in this prospectus for a description of our other significant accounting policies. The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the U.S. requires us to make estimates and judgments that affect the amounts reported in those financial statements and accompanying notes. Although we believe that the estimates we use are reasonable, due to the inherent uncertainty involved in making those estimates, actual results reported in future periods could differ from those estimates.

Significant estimates embedded in the consolidated financial statements for the period presented include revenue recognition, income taxes, stock-based compensation, and fair value measurements for our outstanding warrant.

### ***Revenue Recognition***

We generate revenue primarily through sales of subscriptions to our platform, as well as professional services. We recognize revenue when all of the following conditions are met: (1) there is persuasive evidence of an arrangement; (2) the service or product has been provided to the customer; (3) the amount of fees to be paid by the customer is fixed or determinable; and (4) the collection of related fees is reasonably assured. If collection is not reasonably assured, we defer revenue recognition until collectability becomes reasonably assured. Our arrangements do not contain general rights of return.

#### ***Subscriptions, Software and Support Revenue***

Subscriptions, software and support revenue is primarily related to (1) SaaS subscriptions bundled with maintenance and support and hosting services and (2) term license subscriptions bundled with maintenance and support. To a lesser extent, we also generate revenue from the sale of perpetual software licenses and associated maintenance and support.

Historically, we licensed our software primarily under perpetual licenses, but over time we transitioned from perpetual licenses to subscriptions. As a result, revenue from our perpetual software licenses was 5.0%, 1.9%, and 0.9% of our total revenue for 2014, 2015, and 2016, respectively.

We generally sell our software on a per-user basis. We bill customers and collect payment for subscriptions to our platform in advance on an annual, quarterly or monthly basis. In certain instances, we have had customers pay their entire contract up front.

#### **SaaS Subscriptions**

Our SaaS subscription revenue is derived from customers accessing our cloud offering pursuant to contracts that are generally one to five years in length. We perform all required maintenance and support for our cloud

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offering and we do not separately charge customers for hosting costs. In these arrangements, our customers do not have the right to take the software on-premises and, as a result, such arrangements are not accounted for within the scope of the software revenue guidance. Revenue from SaaS subscriptions is recognized ratably over the term of the subscription, beginning with the date our service is made available to our customer.

### *Term License Subscriptions*

Our term license subscription revenue is derived from customers with on-premises installations of our platform pursuant to contracts that are generally one to five years in length. Customers with term license subscriptions have the right to use our software and receive maintenance and support. Since we do not sell maintenance and support separately from the subscription, revenue for the term license subscription and maintenance and support is recognized ratably over the term of the subscription, upon delivery of the platform to the customer when sold on a standalone basis.

### *Perpetual Licenses*

Our perpetual license revenue is derived from customers with perpetual licenses to our platform and associated maintenance and support contracts. We recognize revenue from perpetual licenses on the date of delivery to our customer. We sell maintenance and support to perpetual license customers separately from the perpetual licenses pursuant to agreements that generally renew annually. Maintenance and support revenue is deferred and recognized ratably over the term of the support period.

### *Professional Services*

Our professional services revenue is comprised of fees for consulting services, including application development and deployment assistance and training related to our platform. Our professional services are not essential to the functionality of our platform because the platform is ready for the customer's use immediately upon delivery and is not modified or customized in any manner.

Consulting services are billed under both time-and-material and fixed-fee arrangements. For standalone time-and-material contracts, we recognize revenue at contractually agreed upon billing rates applied to hours performed, plus the cost of any materials delivered. For standalone fixed-fee contracts, we also recognize revenue as the work is performed using the proportional performance method of accounting. Training revenue is recognized when the associated training services are delivered. Training is also sold in the form of a subscription arrangement where a customer agrees to pay an annual fixed fee for a fixed number of users to have access to all of our training offerings during the year. Revenue from training subscription agreements is recognized ratably over the subscription period.

We defer recognition of revenue from work performed on pending contract modifications until the period in which the modifications are accepted and funding is approved by the customer. Costs of work performed on pending contract modifications are expensed as incurred.

### *Multiple Element Arrangements*

Our multiple element arrangements are from SaaS subscriptions, term license subscriptions, and perpetual licenses that are generally sold in combination with maintenance and support service and frequently with professional services.

### **SaaS Subscriptions**

For multiple element arrangements involving SaaS subscriptions that include professional services in addition to the subscription to our platform, we evaluate each element to determine whether it represents a

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separate unit of accounting. Because there are third-party vendors who routinely sell and provide the same professional services to our customers, our professional services are deemed to have standalone value apart from the SaaS subscription. Additionally, we offer both SaaS subscriptions and professional services on a standalone basis. Professional services revenue is therefore accounted for separately from subscription fees and recognized as the professional services are performed. We allocate revenue to the elements based on the selling price hierarchy using vendor-specific objective evidence, or VSOE, of selling price, third-party evidence, or TPE, of selling price, or if neither exists, best estimated selling price, or BEBP. In cases where we do not have VSOE or TPE of the elements of our arrangements, we use BEBP to allocate revenue. We determine BEBP for a service by considering multiple factors including, but not limited to, evaluating the weighted average of actual sales prices and other factors such as gross margin objectives, pricing practices and growth strategy. Pricing practices taken into consideration include historic contractually stated prices, volume discounts where applicable and our price lists. While we believe we can make reliable estimates regarding these matters, these estimates are inherently subjective. Once the revenue is allocated to these elements, revenue is recognized as such services are provided.

### **Term License Subscriptions**

For multiple element arrangements involving term license subscriptions, maintenance and support and professional services, we do not have VSOE of fair value for the maintenance and support. Our term license subscriptions are generally not sold on a standalone basis, and therefore, we have not established VSOE of fair value for the subscriptions. Consequently, for our bundled arrangements that include certain professional services, there are two undelivered elements for which VSOE of fair value has not been established and, therefore, we utilize the combined services approach and defer all revenue until the software has been delivered and the provision of all services has commenced. We then recognize the entire fee from the arrangement ratably over the remaining period of the arrangement, assuming all other software revenue recognition criteria have been met.

### **Perpetual Licenses**

For multiple element arrangements involving our perpetual software licenses, we allocate revenue to the software license arrangement by determining if VSOE of fair value exists for the undelivered elements, which are usually maintenance and support and professional services. In situations where VSOE of fair value exists for the undelivered elements, we apply the residual method whereby the fees allocated to license revenue are recognized upon delivery, the fees allocated to maintenance and support revenue are recognized over the service period and the fees allocated to professional services and training are recognized as performed. In instances where we lack VSOE of fair value for the undelivered elements, revenue is either deferred until the final element is delivered or recognized ratably over the service period when the only undelivered elements are either professional services or maintenance and support. We have VSOE for maintenance and support elements and professional services elements performed on a time and materials basis. VSOE of fair value is based upon the price charged when the same element is sold separately. In determining VSOE of fair value, we require that a substantial majority of the selling prices fall within a reasonably narrow pricing range. We reassess VSOE annually or more frequently if required.

### **Deferred Commissions**

Deferred commissions are the incremental costs that are directly associated with subscription agreements with customers and consist of sales commissions paid to our direct sales force. Commissions are considered direct and incremental and as such are deferred and amortized over the terms of the related customer contracts consistent with the related revenue. As of December 31, 2015 and 2016 and September 30, 2017, we had total deferred commissions of \$12.7 million, \$18.0 million and \$19.1 million, respectively. Commission expense was \$3.8 million, \$4.6 million, \$6.5 million and \$8.5 million for the years ended December 31, 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively.

## **Stock-Based Compensation**

We account for stock-based compensation expense related to stock-based awards based on the estimated fair value of the award on the grant date. We calculate the fair value of stock options using the Black-Scholes option pricing model. For service-based awards, stock-based compensation expense is recognized on a straight-line basis over the requisite service period. For performance-based awards, stock-based compensation expense is recognized using the accelerated attribution method, based on the probability of satisfying the performance condition. For awards that contain market conditions, compensation expense is measured using a Monte Carlo simulation model and recognized using the accelerated attribution method over the derived service period based on the expected market performance as of the grant date.

All of our currently outstanding awards require the satisfaction of a service condition and stock options awarded under our 2007 Stock Option Plan also required the satisfaction of a liquidity event condition. The liquidity condition was satisfied upon the effective date of our IPO, at which time we recognized \$6.2 million of stock-based compensation expense using the accelerated attribution method from the service start date.

We estimate the fair value of stock options using the Black-Scholes option pricing model, which requires the use of subjective assumptions, including the expected term of the option, the current price of the underlying stock, the expected stock price volatility, expected dividend yield and the risk-free interest rate for the expected term of the option. The expected term represents the period of time the stock options are expected to be outstanding. Due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected term of the stock options, we use the simplified method to estimate the expected term for its stock options. Under the simplified method, the expected term of an option is presumed to be the mid-point between the vesting date and the end of the contractual term. Expected volatility is based on historical volatilities for publicly traded stock of comparable companies over the estimated expected term of the stock options. We assume no dividend yield because dividends on our common stock are not expected to be paid in the near future, which is consistent with our history of not paying dividends on our common stock.

As discussed in “—Recent Accounting Pronouncements,” we have elected to early adopt Accounting Standards Update No. 2016-09, which, among other things, permits an entity to make an entity-wide policy election to either (1) estimate the number of awards that are expected to vest or (2) account for forfeitures when they occur. We have elected to account for forfeitures as they occur, rather than estimate expected forfeitures.

We will continue to use judgment in evaluating the assumptions related to our stock-based compensation on a prospective basis. As we continue to accumulate additional data related to our common stock, we may have refinements to our estimates, which could materially impact our future stock-based compensation expense.

## **Income Taxes**

We use the asset and liability method of accounting for income taxes in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated financial statement carrying amounts of existing assets and liabilities and their respective tax bases. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be reversed. We recognize the effect on deferred tax assets and liabilities of a change in tax rates as income and expense in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized.

Our tax positions are subject to income tax audits by multiple tax jurisdictions throughout the world. We recognize the tax benefit of an uncertain tax position only if it is more likely than not the position is sustainable upon examination by the taxing authority. We measure the tax benefit recognized as the largest amount of benefit which is more likely than not to be realized upon settlement with the taxing authority. We recognize penalties and interest related to unrecognized tax benefits as income tax expense.

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We calculate the current and deferred income tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years and record adjustments based on filed income tax returns when identified. The amount of income taxes paid is subject to examination by U.S. federal, state and foreign tax authorities. The estimate of the potential outcome of any uncertain tax issue is subject to our assessment of relevant risks, facts and circumstances existing at that time. To the extent the assessment of such tax position changes, we record the change in estimate in the period in which we make that determination.

Due to changing economic and political environments in the United States and abroad, we may be impacted by possible tax reform or similar changes in tax law. Specifically, certain proposed changes in the United States may impact the U.S. taxation of our foreign earnings and adversely impact our effective tax rate. However, it is not possible to estimate the impact of such changes at this time and we continue to monitor these changes.

### **Emerging Growth Company Status**

In April 2012, the JOBS Act was enacted. Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this extended transition period and, as a result, we will not adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

### **Recent Accounting Pronouncements**

#### ***Adopted***

In August 2014, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2014-15, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern*, or ASU 2014-15, which amends ASC Subtopic 205-40 to provide guidance about management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related disclosures. Specifically, the amendments (1) provide a definition of the term “substantial doubt,” (2) require an evaluation of every reporting period, (3) provide principles for considering the mitigating effect of management’s plans, (4) require certain disclosures when substantial doubt is alleviated as a result of consideration of management’s plans, (5) require an express statement and other disclosures when substantial doubt is not alleviated and (6) require an assessment for a period of one year after the date that financial statements are issued. ASU 2014-15 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs*, or ASU 2015-03, which simplifies the presentation of debt issuance costs by requiring that such costs be presented in the consolidated balance sheets as a direct deduction from the carrying value of the associated debt instrument, consistent with debt discounts. Subsequent to the issuance of ASU 2015-03, the SEC staff announced that the presentation of debt issuance costs associated with line-of-credit arrangements may be presented as an asset. This announcement was codified by the FASB in ASU No. 2015-15. These ASUs were effective for our year ended December 31, 2016, and their adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-05, *Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement*, or ASU 2015-05, which provides clarification on whether a cloud computing arrangement includes a software license. If a software license is included, the customer should account for the license consistent with its accounting for other software licenses. If a software license is not included, the

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arrangement should be accounted for as a service contract. ASU 2015-05 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes (Topic 740)*, or ASU 2015-17, which requires that all deferred tax assets and liabilities, including any related valuation allowance, be classified as noncurrent on the balance sheet. We elected to early adopt ASU 2015-17 beginning with our year ended December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on our financial condition, results of operations or cash flows.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting (Topic 718)*, or ASU 2016-09, which is intended to simplify several aspects of the accounting for stock-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. We elected to early adopt ASU 2016-09 beginning with our year ended December 31, 2016, and have applied the guidance retrospectively. The adoption of ASU 2016-09 did not have a material impact on our financial condition, results of operations or cash flows.

### ***Not Yet Adopted***

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, or ASU 2014-09, which provides new guidance for revenue recognition. ASU 2014-09 provides that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 also requires improved disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of revenue that is recognized. Entities have the option of using either a full retrospective or modified retrospective approach for the adoption of the standard. In March 2016, the FASB issued ASU No. 2016-08, *Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)*, or ASU 2016-08, which clarifies implementation guidance on principal versus agent considerations in ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, *Identifying Performance Obligations and Licensing*, or ASU 2016-10, which clarifies the identification of performance obligations and the licensing implementation guidance in ASU 2014-09. In addition, in May 2016, the FASB issued ASU No. 2016-12, *Narrow-Scope Improvements and Practical Expedients*, or ASU 2016-12, which clarifies the guidance on assessing collectibility, presentation of sales taxes, noncash consideration and completed contracts and contract modifications at transition. For public entities, the new standard is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2017. For all other entities, the new standard is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods beginning after December 15, 2019. We intend to avail ourselves of Section 107 of the JOBS Act that permits us to defer adoption until January 1, 2019. We are currently evaluating the impact the adoption of these standards will have on our consolidated financial statements.

We currently plan to adopt the new standard using the full retrospective approach; however, the decision regarding the adoption method has not been finalized. Our final determination will depend on a number of factors such as the significance of the impact of the new standard on our financial results, system readiness, including that of software procured from third-party providers, and our ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary.

We are in the initial stages of our evaluation of the impact of the new standard on our accounting policies, processes, and system requirements. We have assigned internal resources in addition to the engagement of third-party service providers to assist in the evaluation. Furthermore, we have made and will continue to make investments in systems to enable timely and accurate reporting under the new standard. While we continue to assess all potential impacts under the new standard there is the potential for significant impacts to the timing of



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recognition of revenue, particularly term license subscriptions and professional services revenue. We also expect an impact to our accounting for contract acquisition costs, both with respect to the amounts that will be capitalized as well as the period of amortization.

Under current industry-specific software revenue recognition guidance, we have historically concluded that we did not have VSOE of fair value of the undelivered services related to term license subscriptions, and accordingly, have recognized term license subscriptions and related services ratably over the subscription term. Professional services included in an arrangement with subscription revenue has also been recognized ratably over the subscription term. The new standard, which does not retain the concept of VSOE, requires an evaluation of whether term license subscriptions and related services, including professional services, are distinct performance obligations and therefore should be separately recognized at a point in time or over time. Depending on the outcome of our evaluation, the timing of when revenue is recognized could change significantly for term license subscriptions and professional services under the new standard.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, or ASU 2016-02, which requires that lessees recognize assets and liabilities for leases with lease terms greater than 12 months in the statement of financial position. ASU 2016-02 also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. The update is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. We are currently evaluating the impact the adoption of ASU 2016-02 will have on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, or ASU 2016-15, which aims to reduce the existing diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. ASU 2016-15 is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted. We are currently in the process of evaluating the impact of adoption of this standard on our consolidated financial statements.

### **Qualitative and Quantitative Disclosures about Market Risk**

We are exposed to market risks in the ordinary course of our business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily the result of fluctuations in interest rates and foreign currency exchange rates.

#### ***Interest Rate Risk***

We had cash and cash equivalents of \$72.3 million as of September 30, 2017, which consisted of cash in readily available checking accounts and overnight repurchase investments. These securities are not dependent on interest rate fluctuations that may cause the principal amount of these assets to fluctuate.

#### ***Foreign Currency Exchange Risk***

Our reporting currency is the U.S. dollar. Due to our international operations, we have foreign currency risks related to revenue and operating expenses denominated in currencies other than the U.S. dollar, primarily the British Pound Sterling, Euro, Australian Dollar and Swiss Franc. Our sales contracts are primarily denominated in the local currency of the customer making the purchase. In addition, a portion of operating expenses are incurred outside the United States and are denominated in foreign currencies. Decreases in the relative value of the U.S. dollar to other currencies may negatively affect revenue and other operating results as expressed in U.S. dollars. We do not believe that an immediate 10% increase or decrease in the relative value of the U.S. dollar to other currencies would have a material effect on operating results.

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We have experienced and will continue to experience fluctuations in net loss as a result of transaction gains or losses related to remeasuring certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. We have not engaged in the hedging of foreign currency transactions to date, although we may choose to do so in the future.

## BUSINESS

### Overview

Appian provides a leading low-code software development platform as a service that enables organizations to rapidly develop powerful and unique applications. The applications created on our platform help companies drive digital transformation and competitive differentiation.

With our platform, organizations can rapidly and easily design, build and implement powerful, enterprise-grade custom applications through our intuitive, visual interface with little or no coding required. Our customers have used applications built on our low-code platform to launch new business lines, automate vital employee workflows, manage complex trading platforms, accelerate drug development and build global procurement systems. With our platform, decision makers can reimagine their products, services, processes and customer interactions by removing much of the complexity and many of the challenges associated with traditional approaches to software development.

Organizations across industries are digitally transforming—leveraging software to automate and optimize mission critical operations, enhance customer experiences and drive competitive differentiation. Historically, organizations have principally relied on packaged software and custom software solutions to operationalize and automate their businesses. Packaged software often fails to address unusual use cases or to enable differentiation and requires organizations to conform their individual processes, needs and systems of record to standardized frameworks. While traditional custom software solutions can be differentiated and tailored to meet strategic objectives, development requires a long, iterative and cumbersome process, as well as costly integration, and relies on scarce developer talent.

We enable organizations to differentiate themselves from their competition through software-enabled digital transformation. Our low-code platform employs an intuitive, visual interface and pre-built development modules that reduce the time required to build powerful and unique applications. We believe that developing applications on our platform can be as simple as drawing a picture. Our platform automates the creation of forms, data flows, records, reports and other software elements that would otherwise need to be manually coded or configured. This functionality greatly reduces the iterative development process, allowing for real-time application optimization and ultimately shortening the time from idea to deployment. Further, our patented Self-Assembling Interface Layer, or SAIL, technology ensures that applications developed on our platform can be immediately and natively deployed across a full range of mobile and desktop devices with no additional customization, including desktop web browsers, tablets and mobile phones. Updates to applications developed with SAIL disseminate automatically across device types to ensure that all users benefit from the most up-to-date functionality. At the same time, we unify enterprise data in a single searchable environment, providing organizations with a comprehensive view of customer, product, organizational asset and other critical information. Rich reporting dashboards capture detailed performance metrics, providing valuable business intelligence and analytics that enable business process optimization. Moreover, our platform can be deployed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases.

Our go-to-market strategy consists of both direct sales and sales through strategic partners. In 2017, almost half of our new customer deals were influenced by our partners. We sell our software almost exclusively through subscriptions and intend to grow our revenue both by adding new customers and increasing the number of users at existing customers that use applications developed on our platform. As of December 31, 2016, we had 280 customers in a wide variety of industries, of which 225 customers were commercial and 55 customers were government or non-commercial entities. Our customers include financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation organizations. As of December 31, 2016, 32% of our commercial customers were Global 2000 organizations, and included 37 Fortune 500 companies, six of the largest 25 global financial services firms by 2016 revenue and eight of the 30 largest global healthcare companies by 2016 revenue. We determined relevant global financial services and healthcare companies by referencing certain independent industry data from S&P Global Market Intelligence. Customers receive all of the

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modules and functionality of our platform with their initial subscription, which facilitates the seamless creation of new applications. Many of our customers begin by building a single application and grow to build dozens of applications on our platform, which implicitly reduces the per-user cost of each application. Generally, the development of new applications results in the expansion of our user base within an organization and a corresponding increase in revenue to us because we charge subscription fees on a per-user basis for the significant majority of our customer contracts. Every additional application that an organization creates on our platform increases the value of our platform for that organization because it further integrates people, process and data across the organization and facilitates knowledge sharing. At the same time, our industry-leading professional services organization enables our customers to more easily build and deploy applications on our platform to achieve their digital transformation goals.

We believe that we have a significant market opportunity in helping organizations accelerate their digital transformation by leveraging our low-code software development platform. Our current core software markets, which include the markets for low-code development platforms, case management software, business process management and platform-as-a-service, are expected to represent a combined \$25.0 billion market opportunity by 2018 and a combined \$45.7 billion market opportunity in the near term. In addition to our current core software markets, we believe that our platform better meets certain of the needs that have been historically addressed by manually-developed custom enterprise software, which is expected to represent a \$169 billion market in 2018. Further, based on the total number of global companies and government institutions in 2016 in relevant industries and our industry-specific average annual recurring revenue for customers as of December 31, 2016, we internally estimate our market opportunity to be approximately \$29 billion in 2016. See “—Our Opportunity” for additional information.

We have experienced strong revenue growth, with revenue of \$89.0 million, \$111.2 million, \$132.9 million and \$126.2 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. Our subscription revenue was \$22.8 million, \$41.5 million, \$60.0 million and \$59.3 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively, representing year-over-year growth rates of 82% from 2014 to 2015, 45% from 2015 to 2016 and 37% from the nine months ended September 30, 2016 to the nine months ended September 30, 2017. Our professional services revenue was \$51.9 million, \$58.0 million, \$63.0 million and \$60.1 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. Over time, as the need for professional services associated with user deployments decreases and the number of end users increases, we expect the mix of total revenue to shift more toward subscription revenue.

We have invested, and intend to continue to invest, in developing our platform, expanding our sales and marketing and research and development capabilities, and providing general and administrative resources to support our growth. As a result, we incurred net losses of \$17.1 million, \$7.0 million, \$12.5 million and \$24.1 million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively. We also had operating cash flows of \$1.5 million, \$(2.1) million, \$(7.8) million and \$(10.1) million in 2014, 2015 and 2016 and the nine months ended September 30, 2017, respectively.

## **Industry Background**

**Software-enabled digital transformation.** Organizations across industries are digitally transforming—leveraging software to automate and optimize mission critical operations, enhance customer experiences and drive competitive differentiation. Software has revolutionized mass transportation, drug development, business-customer interactions and operational management. Software has evolved from being a method for modernization to an opportunity for differentiation. Several key trends are fueling software-enabled digital transformation, including the rise of cloud computing and the Internet of Things and the proliferation of mobile devices. Decision makers are increasingly recognizing the need to capitalize on these trends, with 87% of Global 2000 executives planning digital transformation projects for 2017 and 47% of Global 2000 executives citing digital transformation as their highest corporate priority for 2017, according to a survey conducted by LTM Research, an industry research firm, which was commissioned by us.

**Challenges to effective digital transformation.** Historically, organizations have principally relied on packaged software and custom software solutions to operationalize and automate their businesses. However,

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these solutions are challenged in their ability to facilitate effective software-enabled digital transformation. More specifically:

- **Packaged software is inadequate.** Packaged software, whether delivered in the cloud or on-premises, is a one-size-fits-all solution that performs industry-agnostic functions, such as customer relationship management or enterprise resource management, or serves specific industry verticals without organization-specific differentiation. Organizations are often unable to use packaged software to address unusual use cases and differentiate themselves and must conform their individual processes, needs and systems of record to standardized frameworks. Moreover, for both cross-industry and industry-specific software, the limited scope of functionality often forces organizations to adopt numerous point solutions that can be difficult to integrate.
- **Traditional custom software solutions are expensive and difficult to create.** In contrast, traditional custom solutions are built to address particular organization-specific use cases. Although they allow organizations to better manage their operations and differentiate their businesses, traditional custom software solutions have historically been hampered by several limitations:
  - Traditional application development is a long and cumbersome process, requiring complex coding and an iterative feedback cycle. According to one example cited by Forrester Research Inc., or Forrester, the coding of custom software took an estimated 2.7 years to complete, and therefore the output from a development project may not meet user needs and intentions even on the first day of deployment. In the same report, Forrester found that the use of low-code software development was six to 20 times faster than traditional software development. Further, traditional custom software projects require on-going maintenance and enhancement, without which the resulting software will not keep pace with future needs.
  - The proliferation in mobile devices and the competition among mobile device manufacturers means that device operating systems are continuously being updated, modified and customized for specific hardware configurations. This continual change means that traditional custom software needs to be updated continuously in order to remain relevant across an organization's entire technology environment. Updating such custom software so that it can be used across devices adds another layer of complexity to the entire process.
  - The need for organizations to manage their operations utilizing all of these devices and environments necessitates costly integrations in an attempt to avoid creating information silos. Otherwise, organizations could not effectively share information across applications and processes, which would inhibit collaboration, effective analytics and real-time decision making.
  - Developer talent is scarce and hiring developers to create custom software is costly. According to an LTM Research survey of Global 2000 executives, which was commissioned by us, 79% of respondents said they were concerned that their digital transformation initiatives would be impacted by challenges in hiring and retaining skilled developers. Software developer costs can be greater than \$100,000 per year, depending on location. Given its labor intensive nature, traditional custom software can be very expensive to design, implement and maintain.

Low-code software development platforms have emerged to address the limitations associated with packaged software and traditional custom software solutions. These low-code solutions seek to enable both professional software developers and business users to rapidly build organization-specific applications. However, many existing low-code platforms are either limited in functionality such that they do not support the development of enterprise-grade applications or continue to require significant manual coding, and therefore are not truly "low-code."

### **Benefits of Our Platform**

We enable organizations to differentiate themselves from their competition through software-enabled digital transformation. With our platform, organizations can rapidly and easily design, build and implement powerful,

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enterprise-grade custom applications through our intuitive, visual interface, with little or no coding required. Our patented SAIL technology ensures that applications developed on our platform can be immediately and natively deployed across a full range of mobile and desktop devices with no additional customization, including desktop web browsers, tablets and mobile phones. We also enable organizations to easily modify and enhance applications and automatically disseminate these updates across device types to ensure that all users benefit from the most up-to-date functionality.

Key benefits of our platform include:

- **Rapid and simple innovation through our powerful platform.** Our low-code platform employs an intuitive, visual interface and pre-built development modules that reduce the time required to build powerful and unique applications. Our platform automates the creation of forms, data flows, records, reports and other software elements that would otherwise need to be manually coded or configured. This functionality greatly reduces the iterative development process, allowing for real-time application optimization and ultimately shortening the time from idea to deployment. In turn, organizations can better leverage scarce and costly developer talent to accomplish more digital transformation objectives.
- **Powerful applications to solve complex challenges.** At the core of our platform is an advanced engine that enables the modeling, modification and management of complex processes and business rules. Our heritage as a business process management, or BPM, company provides us with this differentiated understanding of complex processes, and we have incorporated that expertise into our platform to enable the development of powerful applications. Organizations have used our platform to launch new business lines, build large procurement systems, manage retail store layouts, conduct predictive maintenance on field equipment and manage trading platforms, among a range of other use cases. For example, the Defense Information Systems Agency utilizes our platform to manage its large and complex procurement organization, having processed nearly \$3.5 billion worth of contract value on our platform since 2009.
- **Create once, deploy everywhere.** Our patented SAIL technology allows developers to create an application once and deploy it everywhere with the consistency of experience and optimal performance levels that users expect. Applications developed on our platform can be immediately and natively deployed across a full range of mobile and desktop devices with no additional customization, including desktop web browsers, tablets and mobile phones.
- **Seamless integration with existing systems and data.** In contrast to typical enterprise software, our platform does not require that data reside within it in order to enable robust data analysis and cross-department and cross-application insight. Our platform seamlessly integrates with many of the most popular enterprise software applications and data repositories and can be used within many legacy environments. For example, organizations frequently use our platform to extend the life and enhance the functionality of legacy systems of record, such as those used for enterprise resource planning, human capital management and customer relationship management, by building new applications that enhance the functionality of those systems and by leveraging the data within those systems to further optimize and automate operations.
- **Deployment flexibility to serve customer needs.** Our platform can be installed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases. Our flexible deployment model also preserves a seamless path to future cloud deployments for organizations initially choosing on-premises or hybrid approaches for their most sensitive workloads.
- **Industry-leading security.** Our platform is designed to meet the highest demands of our federal government and large enterprise customers. Our cloud platform holds some of the highest security certifications from government agencies and industry organizations, including being one of the first low-code software companies to achieve Federal Risk and Authorization Management Program, or FedRAMP, compliance. Our platform also meets the Payment Card Industry Data Security Standard, or PCI DSS, and the United States Health Insurance Portability and Accountability Act standard.

Our approach to digital transformation goes beyond simply enabling organizations to build custom applications fast. We empower decision makers to reimagine their products, services, processes and customer interactions with software by removing much of the complexity and many of the challenges associated with traditional approaches to software development. Because we make application development easy, organizations can build specific and competitively differentiated functionality into applications to deliver enhanced user experiences and streamlined business operations. This competitive differentiation is of utmost importance as 59% of enterprise IT respondents cited the desire to gain required functionality as the main motivation for developing custom enterprise software, which is not available in purchased packaged software, according to a 2014 study conducted by Forrester Consulting, which was commissioned by us.

## Our Growth Strategy

Key elements of our growth strategy include:

- **Expand our customer base.** As of December 31, 2016, we had 280 customers in a wide variety of industries, including financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation. We believe that the market for our software development platform is in its early stages and that we have a significant opportunity to add additional large enterprise and government customers.
- **Grow through our differentiated land and expand model.** Customers receive all of the modules and functionality of our platform with their initial subscription, which facilitates the seamless creation of new applications. Many of our customers begin by building a single application and grow to build dozens of applications on our platform, which implicitly reduces the per-user cost of each application. Generally, the development of new applications results in the expansion of our user base within an organization and a corresponding increase in revenue to us because we usually charge subscription fees on a per-user basis. Every additional application that an organization creates on our platform increases the value of our platform for that organization because it further integrates people, process and data across the organization and facilitates knowledge sharing. Applications built on our platform may be used only on our platform while customers have active subscriptions, creating substantial switching costs for customers to move to a different software platform. We believe that organizations will develop additional applications and add users to our platform as they continue to recognize these benefits.
- **Grow revenue from key industry verticals.** While our platform is industry-agnostic, we have recently made, and plan to continue to make, investments to enhance the expertise of our sales and marketing organization within our key industry verticals of financial services, healthcare and U.S. federal government. In 2016, we generated over 65% of our subscription revenue from customers in these verticals. We believe that focusing on the digital transformation needs of organizations within these industry verticals can help drive adoption of our platform.
- **Continue to innovate and enhance our platform.** We have made, and will continue to make, investments in research and development to strengthen our platform and expand the number of features available to our customers. We typically offer multiple upgrades each year that allow our customers to benefit from ongoing innovation. Most recently, we expanded our offering to include Quick Apps, which enables non-professional developers to develop native web and mobile applications in minutes with no coding. In addition, our platform allows our customers to embed artificial intelligence, or AI, concepts into their business processes and to use our pre-built integrations to leading providers of AI services. Our platform also incorporates best practices in the field of data science into a tool for our customers to automate the training, deployment and management of AI predictive models. We are also collaborating with other companies to include cognitive computing and Robotic Process Automation capabilities on our platform, allowing the delivery of even more powerful and intelligent applications using an agile delivery capability. As we continue to increase the functionality of our platform and further reduce the amount of developer skill that is required to build robust applications on our platform, we believe that we have the potential to expand the use of our platform.

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- **Expand our international footprint.** Our platform is designed to be natively multi-lingual to facilitate collaboration and address challenges in multi-national organizations. In 2016, approximately 20% of our total revenue was generated from customers outside of the United States. Today, we operate in 11 countries and believe that we have a significant opportunity to grow our international footprint. We are investing in new geographies, including through investment in direct and indirect sales channels, professional services and customer support and implementation partners.
- **Grow our partner base.** We have several strategic partnerships including with Deloitte, KPMG and PricewaterhouseCoopers. These partners work with organizations that are undergoing digital transformation projects and are therefore able to refer potential customers to us. When these partners recognize an opportunity for our platform, they often introduce us to potential customers. We intend to further grow our base of partners to provide broader customer coverage and solution delivery capabilities.

### **Our Opportunity**

We believe that we have a significant market opportunity in helping organizations accelerate their digital transformation by leveraging our low-code software development platform.

- **Current core software markets.** We believe that our platform addresses several key core software markets, as follows:
  - **Low-code.** According to Forrester, the market for low-code development platforms is expected to total \$4.4 billion in 2018 and is expected to grow at a 49% compound annual growth rate to \$21.2 billion in 2022. We were included as a “Leader” in the Forrester Wave: Low-Code Development Platforms in 2017, which is an evaluation of current offering, strategy and market presence.
  - **Case management.** Case management applications are designed to support complex processes that require a combination of human workflows and collaboration, electronic workflows, data management and processing of files and cases. According to Aite, the market for case management software is expected to total \$1.3 billion in 2017 and is expected to grow at a 9% compound annual growth rate to \$1.6 billion in 2019. We were included as a “Leader” based on the strength of our current offering, our strategy and our market presence in the Forrester Wave: Dynamic Case Management in 2016.
  - **BPM.** BPM applications are designed to support the optimization of business processes, including process identification, improvement implementation, and monitoring and analysis. According to IDC, the market for BPM software is expected to total \$4.4 billion in 2017 and is expected to grow at a 4% compound annual growth rate to \$5.0 billion in 2020. We were included as a Leader based on our ability to execute and the completeness of our vision in the Gartner Intelligent Business Process Management Suites Magic Quadrant in 2017.
  - **Application PaaS.** Application platform as a service, or application PaaS, is a cloud service that provides the necessary infrastructure to enable the development, deployment and hosting of software applications. We believe that we are well positioned to capture a portion of the application platform-as-a-service, or application PaaS, market, which IDC estimates to reach \$14.9 billion in 2018, and which is expected to grow at an 6% compound annual growth rate to \$17.9 billion in 2021.

Taken together, these current core software markets are expected to represent a combined \$25.0 billion market opportunity by 2018 and a combined \$45.7 billion market opportunity in the near term.

- **Traditional custom enterprise software market.** In addition to our current core software markets, we believe that our platform better meets certain of the needs that have been historically addressed by manually-developed custom enterprise software, which is expected to represent a \$169 billion market in 2018, according to Forrester.



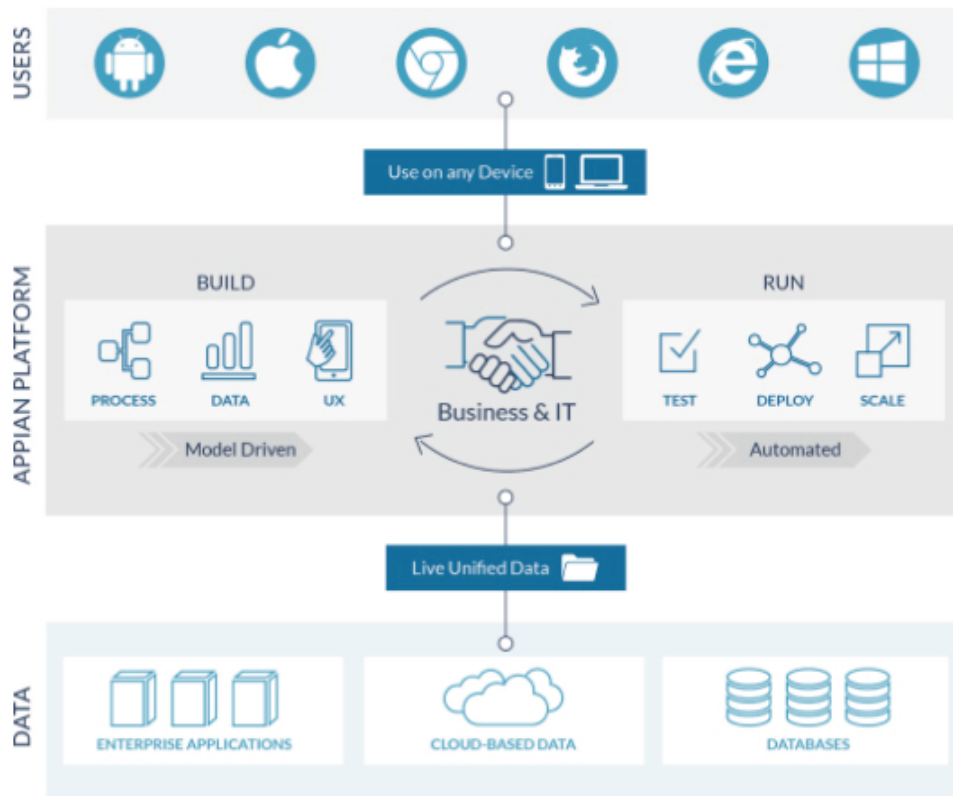
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- **Our internal estimate.** Based on approximately 140,000 global companies and government institutions in 2016 in relevant industries and revenue-based size segments, and our industry- and size-specific average annual recurring revenue for customers as of December 31, 2016, we internally estimate our market opportunity to have been approximately \$29 billion in 2016. We determined relevant global companies and government institutions by industry and size by referencing certain independent industry data from S&P Global Market Intelligence. We calculated industry- and size-specific average annual recurring revenue as of December 31, 2016 by adding the aggregate annual recurring revenue from all existing customers within each industry and size segment and dividing the total by the number of our existing customers in each industry and size segment.

**Our Platform**

With our platform, organizations can rapidly and easily design, build and implement powerful, enterprise-grade custom applications through our intuitive, visual interface, with little or no coding required. We also enable organizations to easily modify and enhance applications and automatically disseminate these updates across device types to ensure that all users benefit from the most up-to-date functionality. Through the speed and power of our platform, organizations can make their digital transformations happen more effectively and efficiently than could be achieved through building an application with Java or other standard programming languages. We believe that developing applications can be as simple as drawing a picture.

At the core of our platform is an advanced engine that enables the modeling, modification and management of complex processes and business rules. Our heritage as a BPM company provides us with this differentiated understanding of complex processes, and we have incorporated that expertise into our platform to enable the development of powerful applications. The following graphic shows our architecture:



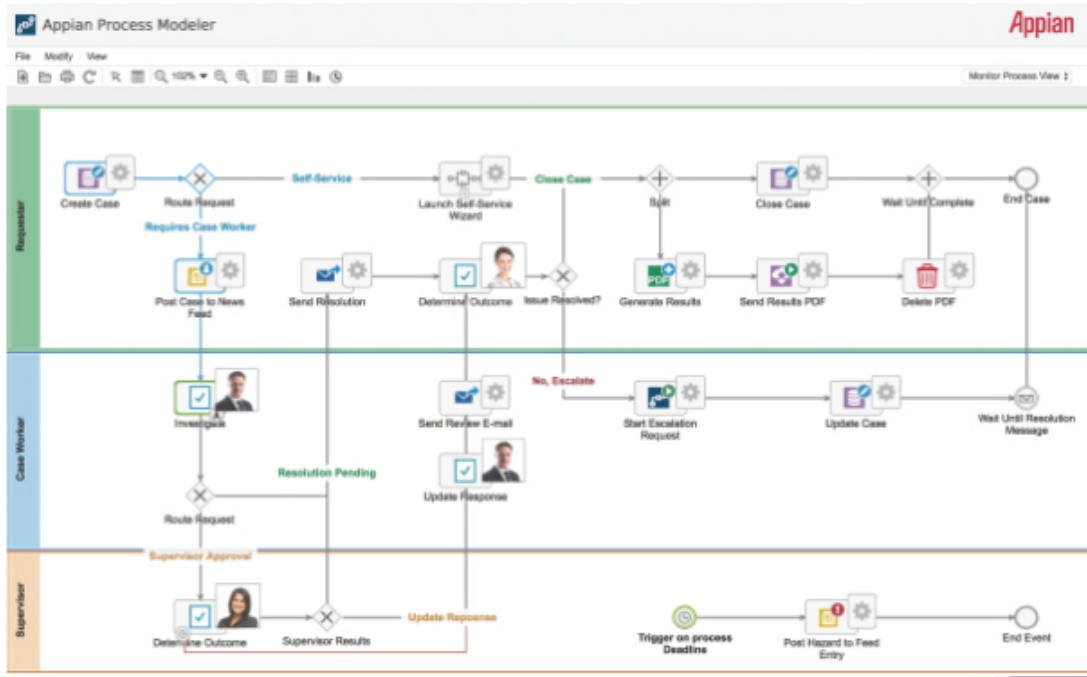
We believe that the key elements of our technology infrastructure are as follows:

**Web-Based Development Environment**

The Appian design interface is a model-driven, web-based development environment for application creation, testing, deployment and performance optimization. Appian design is a shared repository of all Appian components—interfaces, process models, APIs, new component builders and user collaboration modules—and administration utilities for managing people, processes and data.

The Appian design repository incorporates best practices and years of lessons learned from digital transformation initiatives. Common development operations tasks require just a few clicks and can be automated for hands-off deployment. Dramatic improvements in developer productivity can be achieved through user-friendly capabilities such as fast impact analysis of all changes; auto-updating applications and components when data types change; and live views of interfaces under development.

Appian design guides developers through the necessary steps to create the foundation elements of reusable interfaces, records and business processes, while providing all the power that developers need to design, build and implement enterprise systems at scale. The following graphic shows our process modeler.



Organizations have used our platform to launch new business lines, build large procurement systems, manage retail store layouts, conduct predictive maintenance on field equipment and manage trading platforms, among a range of other use cases. For example, the Defense Information Systems Agency utilizes our platform to manage its large and complex procurement organization, having processed over 150,000 contract negotiation correspondences and nearly \$3.5 billion worth of contract value on our platform since 2009.

**Our patented SAIL technology**

SAIL is our patented technology that allows developers to create dynamic and responsive web and native-mobile user interfaces through a “create once, deploy everywhere” architecture. SAIL interfaces only need to be

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created once and SAIL automatically assembles customer applications for optimal viewing on each device type, including desktop web browsers, tablets and mobile phones, and each device operating system, including iOS and different permutations of Android. SAIL leverages native functionality inherent across a myriad of devices and operating systems to ensure the consistency of experience and optimal performance levels that users expect. Updates to applications developed with SAIL are automatically disseminated across device types to ensure that all users benefit from the most up-to-date functionality. This approach enables enterprise mobility without the extensive time and resources that other development approaches require. The following graphic shows how our end-user interface appears across different devices.



We believe that SAIL provides a significant advantage over other platforms that both require extensive customization for various devices at the time of the creation of the new applications and on an on-going basis as mobile device manufacturers continue to update their software and capabilities. Further, in regulated industries, each traditional custom software application must generally undergo its own security assessment and accreditation process, while applications created with SAIL are designed to be compliant with stringent security and numerous rigorous regulatory requirements.

### ***Unified Data***

Appian Records is an advanced data management technology that allows end users to discover and unite enterprise data into a single searchable environment, providing a comprehensive view of an organization's data. In contrast to typical enterprise software, our platform does not require that data reside within it in order to enable robust data analysis and cross-department and cross-application insight. Using standard database software and service connection frameworks, including APIs, our platform seamlessly integrates with many of the most popular enterprise software applications and data repositories and can be used within many legacy environments. Users simply need to assign a name to a given topic and then decide which existing data sources within the enterprise they want to capture. Users can categorize important information by business topic, not just by where that information resides, thereby allowing organizations to unify their data and their processes and effectively access information buried in existing systems. For example, a Record for "Customer A" might bring together data from customer relationship management, accounting and customer support systems to give users a complete view of the customer in their organization. In addition to the benefits of having an immediate snapshot of all centralized data relating to the customer, product, employee or service request, Records also allows organizations to analyze the end-to-end journeys of any given person, entity or asset. Once the connections are established, users may navigate, analyze, collaborate and take action on data from our intuitive dashboards and interactive reports.

### ***Unified End User Interfaces***

Our end user interfaces enable end users to discover data, collaborate with other end users and participate in process actions. The end user experience begins with a news feed that allows end users to monitor key events

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from processes, systems and other end users, providing a unified view of all applications and activity in one place. End users can collaborate with others, obtain status updates, send direct and secure messages and create social tasks for other end users. Our activity stream is designed to be intuitive for end users familiar with popular consumer social interfaces, allowing them to instantly track important events and occurrences and collaborate with little to no training. We also enforce company security policies, so end users can confidently collaborate without fear of compromising regulatory compliance. Our end user interfaces solve the problem of information silos, allowing organizations to respond to constituent feedback in real time by uniting the right team with the right information.

At the same time, our platform provides transparency, visibility and control across all of our applications through a dynamic and powerfully flexible tasking environment. We provide detailed tracking of all human process tasks on our platform, including when tasks have been assigned, addressed and completed by any user. Business Activity Monitoring reports display real-time enterprise performance, bottleneck detection and process optimization while scaling to millions of tasks.

### ***Deployment Flexibility In the Cloud or On-Premises***

Our platform can be deployed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases. Our flexible deployment model also enables organizations not yet ready to move their most sensitive workloads to the cloud to deploy our platform in an on-premises or hybrid manner while preserving a path to potential future cloud deployments.

### **Technology**

We designed our platform to support large global enterprises and government organizations at scale, in the cloud, on-premises and through a hybrid or private cloud approach. We designed, deploy and manage our platform with the goal of it being a “joy to use” for both developers and users of applications.

Our customers build powerful and unique applications using our proprietary and patented SAIL technology, which we also use ourselves to develop features of our platform. We also employ cutting-edge React technology for building web and mobile user interfaces. We use third-party proprietary database and database language technology licensed from Kx Systems, Inc., or Kx, to power the high-performance in-memory database of our platform. Under our agreement with Kx, we are permitted to distribute Kx’s software as a component part of our software platform as well as to host Kx’s software on behalf of our customers through our cloud offering. Our agreement requires Kx to provide maintenance directly to us on the software we license as long as it provides maintenance to any other customers. We pay a variable license fee based on the number of applications built by our customers, subject to an overall cap on payment. We have paid Kx the overall license fee cap in each of the last five years. We may maintain the contract as long as we pay maintenance fees. Kx may terminate the agreement if we materially breach the agreement, become insolvent, make an assignment for the benefit of creditors, or if a bankruptcy proceeding is initiated against us. Unless we fail to pay amounts due under the contract or violate certain of Kx’s intellectual property rights, Kx may not terminate the agreement until either it has successfully litigated a breach action or six months, whichever is earlier.

Our cloud offering is hosted by Amazon Web Services and is available in more than 20 availability zones in eight countries. Data in our cloud offering is written simultaneously to multiple availability zones to protect against loss of customer data. Our software also is able to run in the Microsoft Azure cloud as of the third quarter of 2017. Our enablement of the Microsoft Azure cloud is consistent with our principle of platform neutrality.

Our platform can be deployed in the cloud, on-premises or using a hybrid approach, with organizations able to access the same functionality and data sources in all cases. Further, customers choosing to install our platform on-premises or using a hybrid approach can do so in a flexible manner. We have also implemented a wide set of technical, physical and personnel-based security controls designed to protect against the compromise of confidential data that belongs to both our customers and us.

## **Professional Services**

Since inception, we have invested in our professional services organization to help ensure that customers are able to deploy and adopt our platform. More recently, we have expanded our professional services partner network to further support our customers. We believe our investment in professional services, as well as efforts by partners to build their practices around Appian, will drive increased adoption of our platform.

When we first acquire a new customer, our professional services experts or our deployment partners' professional services experts start the implementation process, which typically takes several weeks. Delivery specialists facilitate deployment of our platform and training personnel provide comprehensive support throughout the implementation process. Customers have access to our Appian Academy, which caters to a diverse range of skill sets and roles within organizations and trains developers on our platform. We also provide instructor-led courses at our Reston, Virginia headquarters and certain of our other offices, as well as virtual classrooms for self-paced learning and on-site training at our customers' offices.

Once our customers have deployed and implemented our platform, our Appian Architects review our customers' programs and applications to find potential issues and provide recommendations on best practice. Our professional services team also assists customers by building applications on our platform for them.

Over time, we expect professional services revenue as a percentage of total revenue to decline as we increasingly rely on strategic partners to help our customers deploy our software.

## **Customer Support**

Our customer support personnel are trained engineers and designers who can work with customers on the front lines to address support issues. We provide email and phone support, with teams in the United States, United Kingdom and Australia. Developers can also find answers to their questions on the Appian Forum, a community site that provides online customer support; real-time collaboration and networking; a growing knowledge base of answers for common questions; and live product webinars and training. The Appian Forum also includes documentation, methodologies and reusable components for our platform. We have consistently been able to achieve at least a 98% customer satisfaction rating for our customer support organization, based on our surveys.

**Our Customers**

Our customers operate in a variety of industries, including financial services, government, education, technology, media and telecom, consumer, healthcare and industrials. As of December 31, 2016, we had 280 customers in a wide variety of industries, of which 225 customers were commercial and 55 customers were government or non-commercial entities. Our customers include financial services, healthcare, government, telecommunications, media, energy, manufacturing and transportation organizations. Our number of customers paying us in excess of \$1 million of annual recurring revenue has grown from one at the end of 2012 to three, six, 11 and 19 at the end of 2013, 2014, 2015 and 2016, respectively. As of December 31, 2016, 32% of our commercial customers were Global 2000 organizations, and included 37 Fortune 500 companies, six of the largest 25 global financial services firms by 2016 revenue and eight of the 30 largest global healthcare companies by 2016 revenue. Generally, our sales force targets its efforts to organizations with over 1,000 employees and \$1 billion in annual revenue. No single end-customer accounted for more than 10% of our total revenue in 2015 or 2016. The Defense Information Systems Agency accounted for 10.7% of our total revenue in 2014 and no other single end-customer accounted for more than 10% of total revenue in that year. Some of our representative customers by sector include the following:



**Customer Case Studies**

**Dallas/Fort Worth International Airport**

*Situation:* Dallas/Fort Worth International Airport, or DFW, is the world’s eighth largest airport in terms of traffic, and has a facility covering roughly 27 square miles. Prior to Appian, DFW mainly used paper-based processes, requiring the physical transportation of forms and files across the sprawling facility. Given its size, DFW needed a more efficient and reliable way to manage its back office operations.

*Solution:* DFW used Appian to build 18 applications in the initial six months following launch that focused on the automation of manual business processes. These processes support the daily operations of Human Resources, Finance and Information Technology functions. Appian can be accessed on mobile devices so that department heads can approve everything from pay raises to promotions from anywhere in the world. Transactions being performed electronically are rapidly approaching 100,000. DFW chose cloud delivery to accelerate the development and deployment of its digital solutions.

### **Sprint**

*Situation:* Sprint is a communications services company that creates more and better ways to connect its customers to the things they care about most. Sprint serves nearly 60 million connections, and is widely recognized for developing, engineering and deploying innovative technologies, including the first wireless 4G service from a national carrier in the United States; leading no-contract brands including Virgin Mobile USA, Boost Mobile, and Assurance Wireless; instant national and international push-to-talk capabilities; and a global Tier 1 Internet backbone. Sprint's wireline network supports its sales representatives and solutions engineers who sell, design, implement and support wireline solutions providing telephony and internet services to Sprint's commercial and public-sector business customers. Through Sprint's efforts to modernize its wireline product portfolio and add data services the company chose Appian for its initiative to significantly streamline and improve its wireline IT infrastructure—a key component of Sprint's overall \$2.5 billion cost reduction strategy.

*Solution:* Appian enabled Sprint to decommission hundreds of applications, remove mainframes and turn down two data centers resulting in added data services and a tremendous cost savings for the company. Remaining applications perform bespoke functions, with Appian providing the connective layer that guides the Sprint user community through all of those components. Using the intuitive interface and powerful data management and presentation capability, Appian has simplified and accelerated the process of selling and delivering solutions to Sprint's business customer base. Process improvements also greatly increased Sprint's ability to pre-qualify customers for wireline services.

### **University of South Florida System**

*Situation:* Serving nearly 48,000 students every year, the University of South Florida System, or USF, is a high-impact, global research system dedicated to student success. USF seeks to prepare students for life in a global environment. Creating the best student experience, and giving students modern tools to manage their educational journey, are both core elements of USF's mission.

*Solution:* Using Appian, USF's information technology department has been working with academic and business leadership to transform experiences for students, faculty and staff. The Archivum program, based on Appian, was piloted in the USF College of Public Health to enable full development and management of a student's course of study, and management of the student/academic advisor relationship on a mobile device. The solution was deployed in three weeks and reduced a two-week process to two days. Realizing Appian's potential for transformation, Archivum has been extended to eight operational areas in 17 months, including course records, medical student lottery, travel and human resource onboarding.

### **Ryder System**

*Situation:* Ryder System, a leader in commercial truck rentals and leasing, had numerous legacy systems and paper-based business processes that it endeavored to improve through automation as a cornerstone to a larger business and technology based transformation. The intent of the project was to improve the operational effectiveness of the business unit, improve the overall customer satisfaction as well as capture meaningful business insights and information from the transformed business process.

*Solution:* Utilizing Appian, Ryder unified these disparate systems and processes through the creation of multiple interconnected web and mobile applications. The Rental Signature Capture mobile app designed with Appian's software encompasses formerly paper-driven processes within the rental cycle, including yard check, which includes processes such as verifying which vehicles are in the yard and their condition and mileage, along with customer vehicle check-out and check-in, and signatures. The solution is accessible via tablet, yielding a faster and more transparent paperless experience. Ryder also developed an Accident Claims application that mobilizes all damage claims reporting, including damage photos, escalations, records of incidents and end-to-end process management. As a result, Ryder has experienced a 50% reduction in rental transaction times (reducing violations of its 20 minutes or less checkout guarantee to less than 1%), and a 10% improvement in satisfaction scores since deploying Appian.

## **Culture and Employees**

We believe that fostering our distinct culture of innovation is an important contributor to our success as a company. When we started Appian, we used to debate about everything. It was second nature since half the founding team had been competitive debaters in college. Debate proved to be a great way to reach the best decisions. Bad ideas couldn't survive; good ideas got better. We encourage everyone to speak up, but we also delegate every decision to a single person. So we can disagree, and we still reach firm resolutions.

We strive to hire the most talented individuals, from top universities and from industry, with an eye towards intelligence, passion and personal generosity. We place those individuals within small, agile teams to maximize their autonomy, creativity and collaboration. That may be why we've been named a top workplace by The Washington Post for three years running.

We started the business as a bootstrap, in the midst of a venture capital boom. We did it because we believe in self-reliance. Paying for our own expenses has made us stronger. A commitment to financial self-sufficiency is woven into our DNA.

Appian is an open, transparent, and data-rich environment because we run Appian on Appian software. We have about 50 applications internal to Appian that run on Appian including everything from cloud operations to pipeline management to free-food alerts. As our own best customer, we get to know our platform deeply, and we can improve it faster.

Our culture was purposefully created by our four founders, who are still heavily involved in operating the business, including recruiting, interviewing and educating all new employees at Appian. Our founders, led by Matt Calkins, our Chief Executive Officer, have intentionally grown our business organically, focusing on developing a single solution—the Appian platform. We do so employing a unified development team located in a single office in the Washington, D.C. metropolitan area to maximize the cohesion and simplicity of our platform and our company. When a client buys Appian software, they get a piece of Appian culture along with it.

As of September 30, 2017, we had 682 full-time employees in the United States and 148 full-time employees internationally. During 2016, we had a voluntary attrition rate of 10% among all employees of our company. We believe that this low voluntary attrition rate is a testament to our company culture. None of our U.S. employees are covered by collective bargaining agreements. We believe our employee relations are good and we have not experienced any work stoppages.

## **Our Competition**

Our main competitors fall into three categories: (1) providers of low-code development platforms, such as salesforce.com and ServiceNow; (2) providers of business process management and case management software, such as IBM, OpenText, Oracle, Pegasystems and SAP; and (3) providers of custom software and customer software solutions that address, or are developed to address, some of the use cases that can be addressed by applications developed on our platform.

As our market grows, we expect that it will attract more highly specialized vendors as well as larger vendors that may continue to acquire or bundle their products more effectively. The principal competitive factors in our market include:

- platform features, reliability, performance and effectiveness;
- ease of use and speed;
- platform extensibility and ability to integrate with other technology infrastructures;
- deployment flexibility;



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- robustness of professional services and customer support;
- price and total cost of ownership;
- strength of platform security and adherence to industry standards and certifications;
- strength of sales and marketing efforts; and
- brand awareness and reputation.

We believe we generally compete favorably with our competitors with respect to the features and performance of our platform, the ease of integration of our applications and the relatively low total cost of ownership of our applications. However, many of our competitors have substantially greater financial, technical and other resources, greater name recognition, larger sales and marketing budgets, broader distribution, more diversified product lines and larger and more mature intellectual property portfolios.

## **Sales and Marketing**

### *Sales*

Our sales organization is responsible for account acquisition and overall market development, which includes the management of the relationships with our customers. While our platform is industry-agnostic, we have recently made, and plan to continue to make, investments to enhance the expertise of our sales organization within our core industry verticals of financial services, healthcare and government. We also expect to continue to grow our sales headcount in all of our principal markets and expand our presence into countries where we currently do not have a direct sales presence.

### *Marketing*

Our marketing efforts focus on building our brand reputation and increasing market awareness of our platform. Marketing activities include sponsorship of, and attendance at, trade shows and conferences; our annual Appian World event; social media and advertising programs; management of our corporate web site and partner portal; press outreach; and customer relations.

## **Research and Development**

Our engineering department is responsible for design, development, testing and release of our platform. Our engineering team closely coordinates with our executive management, which is responsible for creating a vision for our platform, and with our professional services and sales teams, which relay customer demands and possible new use cases or enhancements. Our development efforts focus on the critical areas of our platform, including infrastructure, ease-of-use and flexibility, end-user experience and ability to integrate with other enterprise systems. Research and development expense totaled \$13.5 million, \$16.8 million, \$23.0 million and \$25.9 million for 2014, 2015, 2016 and the nine months ended September 30, 2017, respectively.

## **Intellectual Property**

Our success depends in part upon our ability to protect our core technology and intellectual property. We rely on patents, trademarks, copyrights and trade secret laws, confidentiality procedures, and employee disclosure and invention assignment agreements to protect our intellectual property rights.

As of September 30, 2017, we had two issued patents relating to our SAIL technology and two patent applications pending in the United States relating to our platform. Our issued patent expires in 2034. We cannot assure you whether any of our patent applications will result in the issuance of a patent or whether the examination process will require us to narrow our claims. Any patents that may issue may be contested,

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circumvented, found unenforceable or invalidated, and we may not be able to prevent third parties from infringing them. We also licensed software from third parties for integration into our products, including open source software and other software available on commercially reasonable terms.

We control access to and use of our proprietary software and other confidential information through the use of internal and external controls, including contractual protections with employees, contractors, end-customers and partners, and our software is protected by U.S. and international copyright and trade secret laws. Despite our efforts to protect our trade secrets and proprietary rights through intellectual property rights, licenses, and confidentiality agreements, unauthorized parties may still copy or otherwise obtain and use our software and technology. In addition, we intend to expand our international operations, and effective patent, copyright, trademark, and trade secret protection may not be available or may be limited in foreign countries.

### **Facilities**

We have offices in three U.S. cities and 10 cities outside the United States. Our headquarters are located in Reston, Virginia. We believe that our current facilities are adequate to meet our ongoing needs, and that, if we require additional space, we will be able to obtain additional facilities on commercially reasonable terms.

### **Legal Proceedings**

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that, if determined adversely to us, would individually or taken together have a material adverse effect on our business, operating results, financial condition or cash flows. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management time and resources and other factors.

## MANAGEMENT

### Executive Officers, Key Employees and Directors

The following table sets forth certain information with respect to our executive officers, key employees and directors, including their ages as of September 30, 2017:

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>
<b>Executive Officers</b>		
Matthew Calkins	44	Chief Executive Officer, President, Founder and Chairman of the Board
Robert C. Kramer	42	General Manager, Founder and Director
Mark Lynch	54	Chief Financial Officer
Edward Hughes	66	Senior Vice President, Worldwide Sales
Christopher Winters	45	General Counsel
<b>Key Employees</b>		
Marc Wilson	43	Founder and Senior Vice President, Global Partners & Industry
Michael Beckley	43	Chief Technology Officer, Chief Customer Officer and Founder
Suvajit Gupta	50	Senior Vice President, Engineering
Kevin Spurway	45	Senior Vice President, Marketing
Myles Weber	40	Chief Information Officer
Lang Ly	43	Senior Vice President, Strategy
<b>Non-Employee Directors</b>		
A.G.W. "Jack" Biddle, III	56	Director
Prashanth "PV" Boccassam	49	Director
Michael G. Devine	65	Director
Barbara "Bobbie" Kilberg	73	Director
Michael J. Mulligan	66	Director

#### **Executive Officers**

*Matthew Calkins* is a Founder of Appian and has served as our Chief Executive Officer, President and as Chairman of our board of directors since August 1999. He also served as a director of MicroStrategy, Inc., a publicly held provider of enterprise software platforms, from November 2004 to April 2014. Mr. Calkins holds a B.A. in Economics from Dartmouth College. Our board of directors believes that Mr. Calkins's business expertise and his daily insight into corporate matters as our Chief Executive Officer, as well as his experience as a member of the board of directors of a public company, qualify him to serve on our board of directors.

*Robert C. Kramer* is a Founder of Appian and has served as our General Manager since January 2013 and as a member of our board of directors since 2008. Mr. Kramer served as our Chief Financial Officer from our founding to October 2008 and as our Vice President, Technology from October 2008 to December 2012. Mr. Kramer holds a B.S. in Economics from the Wharton School of the University of Pennsylvania. Our board of directors believes that Mr. Kramer's business expertise and his insight into corporate matters as our General Manager qualify him to serve on our board of directors.

*Mark Lynch* has served as our Chief Financial Officer since October 2008. Mr. Lynch holds a B.S. in Accounting from Pennsylvania State University and an M.B.A. in Finance from George Washington University.

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See “—Involvement in Certain Legal Proceedings” for certain details regarding historical administrative and legal proceedings involving Mr. Lynch.

*Edward Hughes* has served as our Senior Vice President, Worldwide Sales since September 2009. Mr. Hughes holds a B.A. in Philosophy from Catholic University and a J.D. from Potomac Law School.

*Christopher Winters* has served as our General Counsel since September 2015 and our corporate Secretary since November 2015. From June 2013 to August 2015, Mr. Winters was General Counsel at Applied Predictive Technologies, Inc., a software-as-a-service company focused on predictive analytics. From January 2008 to May 2013, Mr. Winters held positions in the legal department of CoStar Group Inc., a provider of commercial real estate information, analytics and online marketplaces. Mr. Winters holds a B.A. in History from Northern Illinois University and a J.D. from Harvard University.

### **Key Employees**

*Marc Wilson* is a Founder of Appian and has served as our Senior Vice President, Global Partners & Industry since January 2014. Mr. Wilson served as our Vice President, Industry Markets from January 2013 to January 2014 and in various other management roles, including as our Vice President, North American Channels, since our founding in August 1999. Mr. Wilson also served as a member of our board of directors from September 2015 to January 2017. Mr. Wilson holds a B.A. in Government from Dartmouth College.

*Michael Beckley* is a Founder of Appian and has served as our Chief Technology Officer since 2007 and Chief Customer Officer since April 2015. From our founding in August 1999 to 2007, Mr. Beckley served as our Vice President of Product Strategy. Mr. Beckley also served as a member of our board of directors from September 2015 to January 2017. Mr. Beckley holds a B.A. in Government from Dartmouth College.

*Suvajit Gupta* has served as our Senior Vice President, Engineering since May 2013. From June 2008 to May 2013, Mr. Gupta served as Chief Architect, Vice President of Development at Eloqua, Inc., a cloud-based marketing automation software company that was acquired by Oracle in 2013. Mr. Gupta holds a B.Tech in Electronics and Communications Engineering from Indian Institute of Technology Kharagpur and an M.S. in Computer and Systems Engineering from Rensselaer Polytechnic Institute.

*Kevin Spurway* has served as our Senior Vice President, Marketing since April 2016. Mr. Spurway served as our Vice President of Operations from October 2014 to March 2016. From July 2010 to October 2014, Mr. Spurway was Senior Vice President of Marketing at MicroStrategy, Inc. Mr. Spurway holds a B.A. in Economics and Government from Dartmouth College and a J.D. from Harvard University.

*Myles Weber* has served as our Chief Information Officer since April 2016. Mr. Weber served as our Vice President, Cloud and Community Services from January 2011 to April 2016. Mr. Weber holds a B.S. in Information and Decision Sciences from the University of Illinois at Chicago.

*Lang Ly* has served as our Senior Vice President, Strategy since May 2017. Ms. Ly served as our Vice President, Strategy from March 2016 through May 2017, as our Vice President, Business Applications from November 2015 through March 2016, and as our Vice President, Application Management from October 2013 through October 2015. From 1996 through March 2013, Ms. Ly held various positions at Microstrategy, Inc. Ms. Ly has a Bachelor’s Degree in Electrical Engineering from Rensselaer Polytechnic Institute and an M.S. in Information Systems Management from George Washington University.

### **Non-Employee Directors**

*A.G.W. “Jack” Biddle, III* has served as a member of our board of directors since 2008. Mr. Biddle has served as a General Partner of Novak Biddle Venture Partners since he co-founded the venture capital firm in

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1996. Mr. Biddle serves as a director for a number of privately held companies. Mr. Biddle holds a B.A. in Economics from the University of Virginia. Our board of directors believes that Mr. Biddle's experience investing in technology businesses and his service on numerous private company boards qualify him to serve on our board of directors.

*Prashanth "PV" Boccassam* has served as a member of our board of directors since 2008. Since January 2009, Mr. Boccassam has been a General Partner at Novak Biddle Venture Partners. From November 2012 to September 2016, Mr. Boccassam also served as the Chief Executive Officer of Orchestro, an analytics software company that was a portfolio company of Novak Biddle Venture Partners. Mr. Boccassam serves as a director for a number of privately held companies. Our board of directors believes that Mr. Boccassam's experience founding and investing in technology businesses and his service on numerous private company boards qualify him to serve on our board of directors.

*Michael G. Devine* has served as a member of our board of directors since March 2015. From 2007 until 2015, Mr. Devine owned and operated a consulting practice assisting technology-oriented portfolio companies of private equity firms. From 2008 until 2011, Mr. Devine was a member of the Board of Directors and Audit Committee of Martek Biosciences. Mr. Devine holds a B.A. from Rider University and an M.B.A. from Pennsylvania State University. Our board of directors believes that Mr. Devine's experience as an audit partner focused on technology companies and his experience as a Board and Audit Committee member of a public company qualify him to serve on our board of directors.

*Barbara "Bobbie" Kilberg* has served as a member of our board of directors since January 2017. Since September 1998, Ms. Kilberg has served as President and Chief Executive Officer of the Northern Virginia Technology Council, a membership and trade association for the technology community in Northern Virginia. Ms. Kilberg holds a B.A. in Political Science from Vassar College, an M.A. in Political Science from Columbia University and an L.L.B. from Yale University. Our board of directors believes that Ms. Kilberg's experience working with technology companies at the Northern Virginia Technology Council qualifies her to serve on our board of directors.

*Michael J. Mulligan* has served as a member of our board of directors since 2008. Since February 2001, Mr. Mulligan has served as President of Sea Level Investment Corporation, a personal investment company. Mr. Mulligan was chairman and Chief Executive Officer of Mapquest.com prior to its acquisition by AOL in 2001. Mr. Mulligan also has held senior positions with American Express, OAG and Berlitz International. Mr. Mulligan holds a B.A. from Wheeling Jesuit University and an M.B.A. from Harvard University. Our board of directors believes that Mr. Mulligan's executive experience qualifies him to serve on our board of directors.

### **Involvement in Certain Legal Proceedings**

On December 14, 2000, pursuant to SEC Litigation Release, No. 16829 (December 14, 2000), Mark Lynch, our Chief Financial Officer, consented to the entry of a final judgment without admitting or denying the allegations of the Securities and Exchange Commission, or the SEC, in a complaint against him relating to his service as Chief Financial Officer of MicroStrategy, Inc. The final judgment, entered by the United States District Court for the District of Columbia, permanently enjoined Mr. Lynch from violating antifraud provisions of the federal securities laws and the rules promulgated thereunder and required Mr. Lynch to pay a \$350,000 civil penalty and disgorgement of \$138,000 of the \$11.1 million paid in connection with these matters. The SEC's complaint alleged, among other things, that Mr. Lynch knowingly or recklessly participated in the material overstatement of MicroStrategy, Inc.'s revenues and earnings in its financial statements included in periodic reports and registration statements filed with the SEC, and that Mr. Lynch directly or indirectly falsified or caused to be falsified MicroStrategy, Inc.'s books and records. MicroStrategy, Inc.'s reporting failures related to premature recognition of revenue in multiple element transactions involving software sales and from deals where MicroStrategy, Inc. had not properly executed contracts in the same fiscal period in which revenue was recorded from those deals.

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On January 17, 2001, as a consequence of the judgment against him, Mr. Lynch was suspended from appearing or practicing as an accountant before the SEC. On June 8, 2005, the SEC granted his petition for reinstatement to appear and practice before the SEC as an accountant responsible for the preparation or review of financial statements required to be filed with the SEC, finding that he had complied with the terms of the January 17, 2001 order. On July 6, 2007, the Commonwealth of Pennsylvania State Board of Accountancy ordered that Mr. Lynch's certificate as a certified public accountant be retroactively suspended from January 17, 2001 to June 8, 2005 to coincide with the period of his suspension from practice before the SEC. Mr. Lynch's license as a certified public accountant is presently designated as inactive.

### **Family Relationships**

There are no family relationships among any of our executive officers or directors.

### **Board Composition**

Our board of directors currently consists of seven members. Each director is elected to the board of directors for a one-year term, to serve until the election and qualification of a successor director at our annual meeting of stockholders, or until the director's earlier removal, resignation or death.

### **Director Independence**

Our board of directors has undertaken a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director concerning such director's background, employment and affiliations, including family relationships, our board of directors determined that Messrs. Biddle, Boccassam, Devine and Mulligan and Ms. Kilberg, representing five of our seven directors, are "independent directors" as defined under current rules and regulations of the SEC and the listing standards of the NASDAQ Stock Market. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director and the transactions involving them described in "Certain Relationships and Related Party Transactions."

### **Board Committees**

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which has the composition and responsibilities described below. From time to time, our board of directors may establish other committees to facilitate the management of our business.

#### ***Audit Committee***

Our audit committee consists of three directors, Messrs. Biddle, Devine and Mulligan, each of whom our board of directors has determined satisfies the independence requirements for audit committee members under the listing standards of the NASDAQ Stock Market and Rule 10A-3 of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Each member of our audit committee meets the financial literacy requirements under the rules and regulations of NASDAQ Stock Market and the SEC. Mr. Devine is the chairman of the audit committee and our board of directors has determined that Mr. Devine is an audit committee "financial expert" as defined by Item 407(d) of Regulation S-K under the Securities Act. The principal duties and responsibilities of our audit committee include, among other things:

- helping our board of directors oversee our corporate accounting and financial reporting processes;
- managing the selection, engagement, qualifications, independence, and performance of a qualified firm to serve as the independent registered public accounting firm to audit our financial statements;

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- discussing the scope and results of the audit with the independent registered public accounting firm, and reviewing, with management and the independent accountants, our interim and year-end operating results;
- developing procedures for employees to submit concerns anonymously about questionable accounting or audit matters;
- reviewing our policies on financial risk assessment and management;
- reviewing related party transactions;
- obtaining and reviewing a report by the independent registered public accounting firm, at least annually, that describes its internal quality-control procedures, any material issues with such procedures, and any steps taken to deal with such issues when required by applicable law; and
- approving (or, as permitted, pre-approving) all audit and all permissible non-audit services, other than de minimis non-audit services, to be performed by the independent registered public accounting firm.

Our audit committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

### ***Compensation Committee***

Our compensation committee consists of three directors, Messrs. Boccassam and Mulligan and Ms. Kilberg. Our board of directors has determined that each of the compensation committee members is a non-employee member of our board of directors as defined in Rule 16b-3 under the Exchange Act and an outside director as that term is defined in Section 162(m) of the Internal Revenue Code of 1986, as amended, or the Code. Mr. Mulligan is the chairman of the compensation committee. The composition of our compensation committee meets the requirements for independence under the current listing standards of the NASDAQ Stock Market and current SEC rules and regulations. The principal duties and responsibilities of our compensation committee include, among other things:

- reviewing and approving the compensation and terms of compensatory arrangements for our executive officers;
- reviewing and recommending to our board of directors the compensation of our directors;
- administering our equity incentive plans and other benefit programs;
- reviewing, adopting, amending or terminating and approving incentive compensation and equity plans and other benefit programs; and
- reviewing and establishing general policies relating to compensation and benefits of our employees and reviewing our overall compensation philosophy.

Our compensation committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

### ***Nominating and Corporate Governance Committee***

Our nominating and corporate governance committee consists of three directors, Messrs. Boccassam and Mulligan and Ms. Kilberg. Mr. Mulligan is the chairman of the nominating and corporate governance committee. The composition of our nominating and governance committee meets the requirements for independence under the current listing standards of the NASDAQ Stock Market and current SEC rules and regulations. The nominating and corporate governance committee's responsibilities include, among other things:

- identifying and evaluating candidates, including the nomination of incumbent directors for reelection and nominees recommended by stockholders, to serve on our board of directors;

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- considering and making recommendations to our board of directors regarding the composition of our board of directors and its committees;
- developing and making recommendations to our board of directors regarding corporate governance guidelines and practices; and
- overseeing periodic evaluations of our board of directors' performance including committees of the board of directors.

Our nominating and governance committee operates under a written charter that satisfies the applicable rules of the SEC and the listing standards of the NASDAQ Stock Market.

### **Code of Conduct**

We have adopted a Code of Conduct, applicable to all of our employees, executive officers and directors. The Code of Conduct is available on our website at [www.appian.com](http://www.appian.com). We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website ([www.appian.com](http://www.appian.com)) as required by applicable law or the listing standards of the NASDAQ Stock Market. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

### **Compensation Committee Interlocks and Insider Participation**

None of our executive officers currently serves, or in the past year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee. None of the members of our compensation committee is an officer or employee of our company, nor have they ever been an officer or employee of our company.



**EXECUTIVE AND DIRECTOR COMPENSATION**

**2016 Summary Compensation Table**

The following table sets forth information regarding compensation earned with respect to the year ended December 31, 2016 by our principal executive officer and the next two most highly compensated executive officers in 2016, whom we refer to as our named executive officers for 2016.

<u>Name and Principal Position</u>	<u>Salary (\$)</u>	<u>Option Awards (\$)<sup>(1)</sup></u>	<u>Non-Equity Incentive Plan Compensation (\$)<sup>(2)</sup></u>	<u>All Other Compensation (\$)<sup>(3)</sup></u>	<u>Total (\$)</u>
Matthew Calkins <sup>(4)</sup> <i>Chief Executive Officer</i>	400,000	8,317,764	143,750	—	8,861,514
Mark Lynch <i>Chief Financial Officer</i>	265,000	610,694	28,750	9,979	914,423
Edward Hughes <i>Senior Vice President, Worldwide Sales</i>	436,588 <sup>(5)</sup>	—	—	—	436,588

- (1) This column reflects the full grant date fair value of options granted during the year measured pursuant to Financial Accounting Standards Board Accounting Standards Codification Topic 718 (ASC 718), the basis for computing stock-based compensation in our consolidated financial statements. Unlike the calculations contained in our consolidated financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the named executive officer will perform the requisite service for the award to vest in full as required by SEC rules. The assumptions we used in valuing options are described in note 6 to our consolidated financial statements included in this prospectus.
- (2) The amount represents compensation earned with respect to the year ended December 31, 2016 and paid in 2017. See “—Employment Arrangements—2016 Bonus Plan” for a description of the material terms of the plan pursuant to which this compensation was awarded.
- (3) The amount reported represents matching contributions to our 401(k) savings plan, which we provide to all eligible employees.
- (4) Mr. Calkins is also a member of our board of directors, but did not receive any additional compensation in his capacity as a director.
- (5) Includes commissions of \$121,588.

**Outstanding Equity Awards as of December 31, 2016**

The following table sets forth certain information about outstanding equity awards granted to our named executive officers that remain outstanding as of December 31, 2016.

<u>Name</u>	<u>Grant Date</u>	<u>Option awards<sup>(1)</sup></u>		<u>Option Exercise Price (\$)<sup>(4)</sup></u>	<u>Option Expiration Date</u>
		<u>Number of Securities Underlying Unexercised Options (#) Exercisable<sup>(2)</sup></u>	<u>Number of Securities Underlying Unexercised Options (#) Unexercisable<sup>(3)</sup></u>		
Matthew Calkins	7/20/2016	—	1,828,080 <sup>(5)</sup>	9.46	7/20/2026
Mark Lynch	10/1/2008	72,200	—	0.58	10/1/2018
	2/11/2009	2,000	—	0.58	2/11/2019
	1/27/2012	48,000	12,000 <sup>(6)</sup>	1.16	1/27/2022
	5/1/2012	800	200 <sup>(7)</sup>	1.16	5/1/2022
	6/3/2014	8,000	12,000 <sup>(8)</sup>	3.67	6/3/2024
Edward Hughes	1/7/2015	4,000	16,000 <sup>(9)</sup>	4.11	1/7/2025
	7/20/2016	—	150,000 <sup>(10)</sup>	9.46	7/20/2026
	9/8/2009	414,066	—	0.89	9/8/2019
	1/27/2012	8,000	2,000 <sup>(6)</sup>	1.16	1/27/2022
	5/1/2012	800	200 <sup>(7)</sup>	1.16	5/1/2022
	9/5/2013	240	160 <sup>(11)</sup>	1.59	9/5/2023

- (1) All of the option awards listed in the table were granted under our 2007 Stock Option Plan, or the 2007 Plan, the terms of which are described under “—Equity Incentive Plans—2007 Plan.”

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- (2) The shares of Class B common stock reflected in this column are vested and exercisable.
- (3) The shares of Class B common stock reflected in this column had not satisfied the option's vesting requirement as of December 31, 2016.
- (4) All of the option awards listed in the table were granted with a per share exercise price equal to or above the fair market value of one share of our common stock on the date of grant, as determined in good faith by our board of directors.
- (5) The shares of Class B common stock listed vest and become exercisable upon the occurrence of (a) a change of control in which the value per share of the Class A common stock is equal or greater than \$28.38 and/or (b) the Class A common stock trades at or above \$28.38 for a period equal to or greater than ninety (90) calendar days following the closing of the IPO.
- (6) The shares of Class B common stock listed vested on January 27, 2017.
- (7) The shares of Class B common stock listed vested on May 1, 2017.
- (8) One third of the shares of Class B common stock listed vested on June 3, 2017. The remaining shares of Class B common stock will vest in two equal installments, on June 3, 2018 and June 3, 2019, subject to the recipient's continued service through each vesting date.
- (9) One fourth of the shares of Class B common stock listed vested on January 7, 2017. The remaining shares of Class B common stock will vest in three equal installments, on January 7, 2018 and each of the next two anniversaries thereof, subject to the recipient's continued service through each vesting date.
- (10) One fifth of the shares of Class B common stock listed vested on July 20, 2017. The remaining shares of Class B common stock will vest in four equal installments, on July 20, 2018 and each of the next three anniversaries thereof, subject to the recipient's continued service through each vesting date.
- (11) One half of the shares of Class B common stock listed vested on September 5, 2017 and the remaining shares of Class B common stock will vest on September 5, 2018, subject to the recipient's continued service through each vesting date.

In connection with our IPO, on April 25, 2017, we granted each of Messrs. Calkins, Lynch and Hughes an option to purchase 100 shares of our Class B common stock under our 2007 Plan, each with an exercise price of \$12.00 per share. These options will vest in five equal annual installments commencing on April 25, 2018, subject to the recipient's continued service through each vesting date. In addition, on October 25, 2017, we granted each of Messrs. Lynch and Hughes restricted stock units for 50,000 shares of Class A common stock under our 2017 Equity Incentive Plan, or the 2017 Plan. These restricted stock units will vest in five equal annual installments commencing on November 5, 2018, subject to the recipient's continued service through each vesting date. We may in the future, on an annual basis or otherwise, grant additional equity awards to our executive officers pursuant to our 2017 Plan, the terms of which are described below under "—Equity Incentive Plans."

### Employment Arrangements

The terms and conditions of employment for each of our named executive officers are set forth in their respective employment agreements. Each of our named executive officers is an at-will employee. The following table sets forth the current base salaries and fiscal year 2017 bonus target of our named executive officers:

<u>Named Executive Officer</u>	<u>Base Salary (\$)</u>	<u>Fiscal Year 2017 Bonus Target (\$)</u>
Matthew Calkins	440,000	250,000
Mark Lynch	265,000	50,000
Edward Hughes	315,000	— <sup>(1)</sup>

- (1) Mr. Hughes participates in our Sales Commission Plan and does not participate in our 2017 Bonus Plan.

### ***Potential Payments upon Termination or Change of Control***

Regardless of the manner in which a named executive officer's service terminates, the named executive officer is entitled to receive amounts earned during his term of service, including salary. Except as described below, our named executive officers are not entitled to any additional severance benefits upon a termination of employment.

**Mark Lynch.** Pursuant to his employment agreement, if Mr. Lynch's employment with us is terminated by us without cause or if Mr. Lynch resigns his employment with us for good reason, in each case within 30 days prior to or one year following a change of control of our company, Mr. Lynch is entitled to receive (i) six months' severance, (ii) full acceleration of vesting with respect to all then-unvested equity awards granted to Mr. Lynch pursuant to our equity incentive plans and (iii) payment of premiums for continued health benefits under COBRA for up to six months.

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*Edward Hughes.* Pursuant to his employment agreement, if Mr. Hughes's employment is terminated by us without cause he is entitled to 12 months' severance.

### **2016 Bonus Plan**

In 2016, certain of our executive officers were eligible to participate in our 2016 Senior Executive Cash Incentive Bonus Plan, or 2016 Bonus Plan. Bonuses were measured as of December 31, 2016 and were paid in February 2017. The 2016 Bonus Plan was designed to motivate and reward executives for the attainment of company-wide financial and individual performance goals. Messrs. Calkins and Lynch were eligible to receive more than 100% of their target bonuses if our performance exceeded the targets set forth in the 2016 Bonus Plan. Messrs. Calkins and Lynch received bonuses of \$143,750 and \$28,750, respectively, pursuant to the terms of the 2016 Bonus Plan.

### **2017 Bonus Plan**

Messrs. Calkins and Lynch are eligible to participate in our 2017 Senior Executive Cash Incentive Bonus Plan, or 2017 Bonus Plan. The 2017 Bonus Plan is designed to motivate and reward executives for the attainment of company-wide and individual performance goals. Messrs. Calkins and Lynch are eligible to receive more than 100% of their target bonuses if our performance exceeds the targets set forth in the 2017 Bonus Plan.

### **Sales Commission Plan**

We establish sales commission plans to encourage and reward contributions to our long-term revenue growth. Mr. Hughes was, and continues to be, eligible to receive compensation under our sales commission plans. Under our sales commission plan for 2016, Mr. Hughes' target commission was \$175,000. Mr. Hughes received commissions of \$121,588 pursuant to our sales commission plan for 2016. Under our sales commission plan for 2017, Mr. Hughes' target commission is \$175,000.

### **Director Compensation**

Our board of directors has adopted a director compensation policy for non-employee directors, which provides for the compensation of non-employee directors with cash and equity compensation. Under the policy, each non-employee director receives an annual board service retainer of \$130,000. The chairperson of each of our audit committee and our compensation committee receives additional annual committee chair service retainers of \$20,000 and \$10,000, respectively. Members of our audit committee and our compensation committee receive additional annual cash retainers of \$10,000 for each such committee of which they are a member, in addition to any amounts that such members may receive for service as chairperson. The annual retainers set forth above are paid one-half in the form of cash and one-half in the form of fully-vested shares of our Class A common stock to be issued pursuant to our 2017 Plan. The number of shares of Class A common stock is determined by dividing the dollar amount of retainers to be paid in shares by the fair market value per share of our common stock on the date the retainer is payable, rounded down to the nearest whole share. All equity awards under this policy are also subject to the limitations on compensation payable to non-employee directors set forth in our 2017 Plan. The annual retainers are paid or granted, as applicable, in equal quarterly installments in advance on the first day of each fiscal quarter in which the service occurs. Non-employee directors who join our board of directors at a time other than the first day of a fiscal quarter are paid and granted a pro-rated portion of the annual retainer. We also reimburse all reasonable out-of-pocket expenses incurred by non-employee directors in attending meetings of our board of directors or any committee thereof.

### **2016 Director Compensation Table**

The following table sets forth information regarding the compensation earned for service on our board of directors during the year ended December 31, 2016 by our directors who were not also our named executive

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officers. Matthew Calkins, our Chief Executive Officer, is also a member of our board of directors, but did not receive any additional compensation for service as a director. Mr. Calkins's compensation as a named executive officer is set forth above under "—2016 Summary Compensation Table." Mr. Kramer is an executive officer of our company but does not receive any additional compensation for service as a director and is not a named executive officer for 2016.

<u>Name</u>	<u>Fees Earned or Paid in Cash (\$)</u>	<u>Option Awards(s)<sup>(1)(5)</sup></u>	<u>Non-Equity Incentive Plan Compensation(\$)<sup>(2)</sup></u>	<u>All Other Compensation(\$)<sup>(3)</sup></u>	<u>Total (\$)</u>
Michael G. Devine	20,000	—	—	—	20,000
Michael J. Mulligan	20,000	—	—	—	20,000
Marc Wilson <sup>(4)</sup>	300,000	—	28,750	8,917	337,667
Michael Beckley <sup>(4)</sup>	300,000	—	28,750	7,104	335,854

(1) This column reflects the full grant date fair value of options granted during the year measured pursuant to ASC 718, the basis for computing stock-based compensation in our consolidated financial statements. Unlike the calculations contained in our consolidated financial statements, this calculation does not give effect to any estimate of forfeitures related to service-based vesting, but assumes that the director will perform the requisite service for the award to vest in full as required by SEC rules. The assumptions we used in valuing options are described in note 6 to our consolidated financial statements included elsewhere in this prospectus.

(2) The amount represents compensation earned with respect to the year ended December 31, 2016 and paid in 2017 pursuant to the terms of our 2016 Bonus Plan.

(3) The amount reported consists of matching contributions to our 401(k) savings plan, which we provide to all eligible employees, and reimbursement of gym membership.

(4) Mr. Wilson, our Senior Vice President, Industry Markets, and Mr. Beckley, our Chief Technology Officer, served as members of our board of directors until January 2017. Neither received additional compensation for services as a director.

(5) The table below shows the aggregate number of option awards outstanding for each of our directors who is not a named executive officer as of December 31, 2016:

<u>Name</u>	<u>Option Awards (#)<sup>(a)(b)</sup></u>
Michael G. Devine	90,000 <sup>(c)</sup>
Michael J. Mulligan	140,602 <sup>(d)</sup>

(a) All of the option awards listed in the table were granted under the 2007 Plan.

(b) Vested and unvested shares of Class B common stock reflected in this column became exercisable following the IPO.

(c) Two-fifths of the shares of Class B common stock reflected in this column are fully vested. The remaining shares will vest over a three-year period with 20% of the shares of Class B common stock vesting on March 26, 2018 and 20% of the shares of Class B common stock vesting on each anniversary thereof, subject to the recipient's continued service through each vesting date.

(d) The shares of Class B common stock reflected here are fully vested.

## Equity Incentive Plans

### 2017 Equity Incentive Plan

Our board of directors has adopted and our stockholders have approved our 2017 Plan, effective as of May 24, 2017. After the 2017 Plan became effective, no further grants were made under our 2007 Plan, as described below under "2007 Plan." As of September 30, 2017, 8,000 options and 47,855 restricted stock units have been granted and 10,841 shares of our Class A common stock have been issued under our 2017 Plan.

**Stock Awards.** The 2017 Plan provides for the grant of incentive stock options within the meaning of Section 422 of the Code, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards, performance-based stock awards, and other forms of equity compensation, which are collectively referred to as stock awards. Additionally, the 2017 Plan provides for the grant of performance cash awards. Incentive stock options may be granted only to employees. All other awards may be granted to employees, including officers, and to non-employee directors and consultants.

**Share Reserve.** Initially, the aggregate number of shares of our Class A common stock that may be issued pursuant to stock awards under the 2017 Plan after the 2017 Plan became effective is 14,197,610, which is the

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sum of (1) 6,000,000 shares, (2) the number of shares reserved for issuance under our 2007 Plan at the time our 2017 Plan became effective, up to a maximum of 421,442 shares, and (3) the number of shares subject to stock options or other stock awards granted under our 2007 Plan that would have otherwise returned to our 2007 Plan (such as upon the expiration or termination of a stock award prior to vesting), up to a maximum of 7,776,168 shares. The maximum number of shares of Class A common stock that may be issued upon the exercise of incentive stock options under our 2017 Plan is 6,000,000 shares.

No person may be granted stock awards covering more than 4,000,000 shares of our Class A common stock under our 2017 Plan during any calendar year pursuant to stock options, stock appreciation rights and other stock awards whose value is determined by reference to an increase over an exercise or strike price of at least 100% of the fair market value on the date the stock award is granted. Additionally, no person may be granted in a calendar year a performance stock award covering more than 2,000,000 shares or a performance cash award having a maximum value in excess of \$5,000,000. Such limitations are designed to help assure that any deductions to which we would otherwise be entitled with respect to such awards will not be subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to any covered executive officer imposed by Section 162(m) of the Code.

If a stock award granted under the 2017 Plan expires or otherwise terminates without being exercised in full, or is settled in cash, the shares of our Class A common stock not acquired pursuant to the stock award again will become available for subsequent issuance under the 2017 Plan. In addition, the following types of shares under the 2017 Plan may become available for the grant of new stock awards under the 2017 Plan: (1) shares that are forfeited to or repurchased by us prior to becoming fully vested; (2) shares withheld to satisfy income or employment withholding taxes; or (3) shares used to pay the exercise or purchase price of a stock award. Shares issued under the 2017 Plan may be previously unissued shares or reacquired shares bought by us on the open market.

*Administration.* Our board of directors, or a duly authorized committee thereof, has the authority to administer the 2017 Plan. Our board of directors may also delegate to one or more of our officers the authority to (1) designate employees (other than other officers) to be recipients of certain stock awards, (2) determine the number of shares of Class A common stock to be subject to such stock awards, and (3) specify the other terms and conditions, including the strike price or purchase price and vesting schedule, applicable to such awards. Subject to the terms of the 2017 Plan, our board of directors or the authorized committee, referred to as the plan administrator, determines recipients, dates of grant, the numbers and types of stock awards to be granted and the terms and conditions of the stock awards, including the period of their exercisability and vesting schedule applicable to a stock award. Subject to the limitations set forth below, the plan administrator also determines the exercise price, strike price or purchase price of awards granted and the types of consideration to be paid for the award.

The plan administrator has the authority to modify outstanding awards under our 2017 Plan. Subject to the terms of our 2017 Plan, the plan administrator has the authority, without stockholder approval, to reduce the exercise, purchase or strike price of any outstanding stock award, cancel any outstanding stock award in exchange for new stock awards, cash or other consideration, or take any other action that is treated as a repricing under generally accepted accounting principles, with the consent of any adversely affected participant.

*Stock Options.* Incentive and nonstatutory stock options are evidenced by stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for a stock option, within the terms and conditions of the 2017 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2017 Plan vest at the rate specified by the plan administrator.

The plan administrator determines the term of stock options granted under the 2017 Plan, up to a maximum of 10 years. Unless the terms of an option holder's stock option agreement provide otherwise, if an option

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holder's service relationship with us, or any of our affiliates, ceases for any reason other than disability, death or cause, the option holder may generally exercise any vested options for a period of three months following the cessation of service. The option term will automatically be extended in the event that exercise of the option following such a termination of service is prohibited by applicable securities laws or our insider trading policy. If an option holder's service relationship with us or any of our affiliates ceases due to disability or death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, options generally terminate immediately. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of Class A common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is a nonqualified stock option, and (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. An optionholder may designate a beneficiary, however, who may exercise the option following the option holder's death.

*Tax Limitations on Incentive Stock Options.* The aggregate fair market value, determined at the time of grant, of our Class A common stock with respect to incentive stock options that are exercisable for the first time by an optionholder during any calendar year under all of our equity incentive plans may not exceed \$100,000. Options or portions thereof that exceed such limit will be treated as nonqualified stock options. No incentive stock option may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our affiliates unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant and (2) the term of the incentive stock option does not exceed five years from the date of grant.

*Restricted Stock Awards.* Restricted stock awards are evidenced by restricted stock award agreements adopted by the plan administrator. Restricted stock awards may be granted in consideration for (1) cash, check, bank draft or money order, (2) services rendered to us or our affiliates, or (3) any other form of legal consideration. Class A common stock acquired under a restricted stock award may, but need not, be subject to a share repurchase option in our favor in accordance with a vesting schedule as determined by the plan administrator. Rights to acquire shares under a restricted stock award may be transferred only upon such terms and conditions as set by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Restricted Stock Unit Awards.* Restricted stock unit awards evidenced by restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration or for no consideration. A restricted stock unit award may be settled by cash, delivery of stock, a combination of cash and stock as deemed appropriate by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Rights under a restricted stock units award may be transferred only upon such terms and conditions as set by the plan administrator. Restricted stock unit awards may be subject to vesting as determined by the plan administrator. Except as otherwise provided in the applicable award agreement, restricted stock units that have not vested will be forfeited upon the participant's cessation of continuous service for any reason.

*Stock Appreciation Rights.* Stock appreciation rights are evidenced by stock appreciation grant agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation

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right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Upon the exercise of a stock appreciation right, we will pay the participant an amount in cash or stock equal to (1) the excess of the per share fair market value of our common stock on the date of exercise over the strike price, multiplied by (2) the number of shares of Class A common stock with respect to which the stock appreciation right is exercised. A stock appreciation right granted under the 2017 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator.

The plan administrator determines the term of stock appreciation rights granted under the 2017 Plan, up to a maximum of ten years. Unless the terms of a participant's stock appreciation right agreement provides otherwise, if a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. The stock appreciation right term will be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Unless the plan administrator provides otherwise, stock appreciation rights generally are not transferable except by will, the laws of descent and distribution, or pursuant to a domestic relations order. A stock appreciation right holder may designate a beneficiary, however, who may exercise the stock appreciation right following the holder's death.

*Performance Awards.* The 2017 Plan permits the grant of performance-based stock and cash awards that may qualify as performance-based compensation that is not subject to the \$1,000,000 limitation on the income tax deductibility of compensation paid to a covered executive officer imposed by Section 162(m) of the Code. To help assure that the compensation attributable to certain types of performance-based awards will so qualify, our compensation committee can structure such awards so that stock or cash will be issued or paid pursuant to such award only after the achievement of certain pre-established performance goals during a designated performance period.

The performance goals that may be selected include one or more of the following: (1) earnings (including earnings per share and net earnings); (2) earnings before interest, taxes and depreciation; (3) earnings before interest, taxes, depreciation and amortization; (4) total stockholder return; (5) return on equity or average stockholders' equity; (6) return on assets, investment, or capital employed; (7) stock price; (8) margin (including gross margin); (9) income (before or after taxes); (10) operating income; (11) operating income after taxes; (12) pre-tax profit; (13) operating cash flow; (14) sales or revenue targets; (15) increases in revenue or product revenue; (16) expenses and cost reduction goals; (17) improvement in or attainment of working capital levels; (18) economic value added (or an equivalent metric); (19) market share; (20) cash flow; (21) cash flow per share; (22) share price performance; (23) debt reduction; (24) implementation or completion of projects or processes; (25) subscriber satisfaction; (26) stockholders' equity; (27) capital expenditures; (28) debt levels; (29) operating profit or net operating profit; (30) workforce diversity; (31) growth of net income or operating income; (32) billings; and (33) to the extent that an award is not intended to comply with Section 162(m) of the Code, other measures of performance selected by our board of directors.

The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise (1) in the award agreement at the time the award is granted or (2) in such other document setting forth the performance goals at the time the goals are established, we will appropriately make adjustments

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in the method of calculating the attainment of performance goals as follows: (a) to exclude restructuring and/or certain other specified nonrecurring charges; (b) to exclude exchange rate effects, as applicable, for non-U.S. dollar denominated goals; (c) to exclude the effects of changes to generally accepted accounting principles; (d) to exclude the effects of any statutory adjustments to corporate tax rates; and (e) to exclude the effects of any “extraordinary items” as determined under generally accepted accounting principles. In addition, we retain the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of the goals. The performance goals may differ from participant to participant and from award to award.

*Other Stock Awards.* The plan administrator may grant other awards based in whole or in part by reference to our Class A common stock. The plan administrator will set the number of shares under the stock award and all other terms and conditions of such awards.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2017 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued upon the exercise of incentive stock options, (4) the class and maximum number of shares subject to stock awards that can be granted in a calendar year or as performance stock awards (as established under the 2017 Plan pursuant to Section 162(m) of the Code) and (5) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

*Corporate Transactions.* In the event of certain specified significant corporate transactions, the plan administrator has the discretion to take any of the following actions with respect to stock awards:

- arrange for the assumption, continuation or substitution of a stock award by a surviving or acquiring entity or parent company;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring entity or parent company;
- accelerate the vesting of the stock award and provide for its termination prior to the effective time of the corporate transaction;
- arrange for the lapse of any reacquisition or repurchase right held by us;
- cancel or arrange for the cancellation of the stock award in exchange for such cash consideration, if any, as our board of directors may deem appropriate or for no consideration; or
- make a payment equal to the excess of (1) the value of the property the participant would have received upon exercise of the stock award over (2) the exercise price or strike price otherwise payable in connection with the stock award.

Our plan administrator is not obligated to treat all stock awards, even those that are of the same type, in the same manner.

Under the 2017 Plan, a significant corporate transaction is generally the consummation of (1) a sale or other disposition of all or substantially all of our consolidated assets, (2) a sale or other disposition of at least 50% of our outstanding securities, (3) a merger, consolidation or similar transaction following which we are not the surviving corporation, or (4) a merger, consolidation or similar transaction following which we are the surviving corporation but the shares of our Class A common stock outstanding immediately prior to such transaction are converted or exchanged into other property by virtue of the transaction.

*Change in Control.* The plan administrator may provide, in an individual award agreement or in any other written agreement between a participant and us that the stock award will be subject to additional acceleration of vesting and exercisability or settlement in the event of a change in control. Under the 2017 Plan, a change in



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control is generally (1) the acquisition by a person or entity of more than 50% of our combined voting power other than by merger, consolidation or similar transaction; (2) a consummated merger, consolidation or similar transaction immediately after which our stockholders cease to own more than 50% of the combined voting power of the surviving entity; or (3) a consummated sale, lease or exclusive license or other disposition of all or substantially all of our consolidated assets.

*Amendment and Termination.* Our board of directors has the authority to amend, suspend, or terminate our 2017 Plan, provided that such action does not materially impair the existing rights of any participant without such participant's written consent and provided further that certain types of amendments will require the approval of our stockholders. No incentive stock options may be granted after the tenth anniversary of the date our board of directors adopted our 2017 Plan.

### **2007 Plan**

Our board of directors adopted, and our stockholders approved, the 2007 Stock Option Plan, as amended, or the 2007 Plan, in May 2007, and the 2007 Plan was last amended by our board of directors and approved by our stockholders in July 2016. Our 2007 Plan provided for the grant of incentive stock options within the meaning of Section 422 of the Code to our employees, and for the grant of nonstatutory stock options to our officers, directors, employees, consultants and advisers.

*Authorized Shares.* As of September 30, 2017, 556,220 shares issued upon the exercise of options granted under our 2007 Plan were outstanding and options to purchase 7,383,928 shares of our Class B common stock were outstanding at a weighted average exercise price of \$6.04 per share. No further options may be granted under our 2007 Plan, but all outstanding options will continue to be governed by their existing terms.

*Changes to Capital Structure.* In the event that there is a specified type of change in our capital structure, such as a stock split or recapitalization, appropriate adjustments will be made to the class and number of shares covered by, and the exercise or purchase price of, each outstanding stock option.

*Administration.* Our board of directors, or a committee thereof appointed by our board of directors, administered our 2007 Plan and the options granted under it. Our board of directors delegated its authority to administer our 2007 Plan to our compensation committee.

*Stock Options.* The 2007 Plan provided for the grant of nonqualified and incentive stock options to purchase Class B common stock. The 2007 Plan requires options to have an exercise price not less than the fair market value of the underlying shares on the date of grant and a term not exceeding 10 years. Options granted under the 2007 Plan were not exercisable unless and until there was a change of control (as defined in the 2007 Plan) or we completed an underwritten public offering of our common stock pursuant to an effective registration statement filed under the Securities Act of 1933, whichever occurred first. Such options became exercisable in May 2017 upon our IPO.

*Non-Transferability.* Generally, the 2007 Plan does not allow for the transfer of awards and only the recipient of an award may exercise such award during his or her lifetime.

*Corporate Transactions.* Our 2007 Plan provides that, in the event of a specified change of control transaction, including a merger or consolidation in which we are a party, or the sale, exchange or transfer of all or substantially all of our assets, wherein, in either such event, our stockholders immediately before such event do not retain immediately after such event direct or indirect beneficial ownership of more than fifty percent of the total combined voting power of our outstanding voting stock or the corporation or corporations to which our assets were transferred, the surviving, continuing, successor, or purchasing corporation or parent corporation thereof, as the case may be, may either assume our rights and obligations under each outstanding option or substitute for each outstanding option a substantially equivalent option for the acquiring corporation's stock. In the event that the acquiring corporation refuses to assume or substitute for each outstanding option, any option that is not exercised as of the date of the event will terminate and cease to be outstanding.

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*Amendment and Termination.* The 2007 Plan was terminated in connection with the IPO and no further options will be granted thereunder. All outstanding options under the 2007 Plan will continue to be governed by their existing terms.

### **401(k) Plan**

We maintain a defined contribution retirement plan that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees may defer eligible compensation on a pre-tax basis, up to the statutorily prescribed annual limits on contributions under the Code. We have the ability to make discretionary contributions to the 401(k) plan. For 2016, during each pay period, we made matching contributions of \$0.50 for each \$1.00 of employee contribution up to a maximum of 4% of the employee's gross compensation for the applicable pay period. We expect to do the same in 2017. Employee contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participant's directions. Employees are immediately and fully vested in their contributions. The vesting of contributions we make is tied to years of service with our contributions being fully vested after four years of service. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan's related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan.

### **Limitations on Liability and Indemnification Matters**

Our amended and restated certificate of incorporation contains provisions that limit the liability of our current and former directors for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

This limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation provides that we are authorized to indemnify our directors and officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws provide that we are required to indemnify our directors and executive officers to the fullest extent permitted by Delaware law. Our amended and restated bylaws also provide that, upon satisfaction of certain conditions, we are required to advance expenses incurred by a director or executive officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. Our amended and restated bylaws also provide our board of directors with discretion to indemnify our other officers and employees when determined appropriate by our board of directors. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses, including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any

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action or proceeding. We believe that these provisions and agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions. At present, there is no pending litigation or proceeding involving any of our directors, officers or employees for which indemnification is sought, and we are not aware of any threatened litigation that may result in claims for indemnification.

### **Rule 10b5-1 Sales Plans**

Our directors and executive officers may adopt written plans, known as Rule 10b5-1 plans, in which they will contract with a broker to buy or sell shares of our Class A common stock (including Class A common stock issuable upon conversion of Class B common stock held by them) on a periodic basis. Under a Rule 10b5-1 plan, a broker executes trades pursuant to parameters established by the director or executive officer when entering into the plan, without further direction from them. The director or executive officer may amend or terminate a Rule 10b5-1 plan in some circumstances. Our directors and executive officers also may buy or sell additional shares outside of a Rule 10b5-1 plan when they are not in possession of material nonpublic information subject to compliance with the terms of our insider trading policy. Prior to 90 days after the date of this prospectus, subject to early termination, the sale of any shares under such plan would be subject to the lock-up agreement that the director or executive officer has entered into with the underwriters.

## CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following is a summary of transactions since January 1, 2014 to which we have been a participant in which the amount involved exceeded or will exceed \$120,000, and in which any of our then directors, executive officers or holders of more than 5% of any class of our capital stock at the time of such transaction, or any members of their immediate family, had or will have a direct or indirect material interest.

### Series B Preferred Stock Financing

In February 2014, we sold an aggregate of 6,120,050 shares of our Series B convertible preferred stock at a price of \$6.1274 per share for aggregate proceeds of approximately \$37.5 million. The following table summarizes the purchases of shares of our Series B convertible preferred stock by our directors, executive officers and holders of more than 5% of any class of our capital stock:

<u>Related Party</u>	<u>Shares of Series B Preferred Stock (#)</u>
Entities affiliated with New Enterprise Associates <sup>(1)</sup>	6,118,418

(1) Consists of 6,114,338 shares of Series B preferred stock held by New Enterprise Associates 14, L.P. and 4,080 shares of Series B preferred stock held by NEA Ventures 2014, L.P. For additional information regarding beneficial ownership of these shares see note 2 to the beneficial ownership table in "Principal Stockholders."

Immediately prior to the completion of the IPO, all shares of convertible preferred stock then outstanding were automatically converted into shares of common stock on a one-for-one basis, and then reclassified as shares of Class B common stock.

### Repurchase of Common Stock

In February 2014, we repurchased an aggregate of 6,185,548 shares of our common stock from our founders and certain option holders, at a price equal to \$6.1274 per share, less the applicable exercise price in the case of shares subject to options, for aggregate cash consideration of approximately \$37.5 million. The following table summarizes shares of our common stock repurchased from our directors, executive officers and holders of more than 5% of any class of our capital stock, or any members of their immediate family, as of the date of such transaction:

<u>Related Party</u>	<u>Shares of Common Stock (#)</u>
Matthew Calkins	3,575,282
Michael Beckley	1,400,000
Marc Wilson	450,000
Robert C. Kramer	300,000
Edward Hughes	106,366
Mark Lynch	33,800
Elizabeth Epstein <sup>(1)</sup>	5,200

(1) Ms. Epstein joined us in 2006 and later became Mr. Kramer's wife.

### Investors' Rights, Management Rights, Voting and Co-Sale Agreements

In connection with our preferred stock financings, we entered into investors' rights, management rights, voting and right of first refusal and co-sale agreements containing registration rights, information rights, voting rights and rights of first refusal, among other things, with certain holders of our preferred stock and certain

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holders of our Class B common stock. These stockholder agreements terminated upon the closing of the IPO, except for the registration rights granted under our investors' rights agreement, as more fully described in "Description of Capital Stock—Registration Rights."

### **Employment Arrangements**

We have entered into employment agreements with certain of our executive officers. For more information regarding these agreements with our named executive officers, see "Executive and Director Compensation—Employment Arrangements." In addition, in January 2006 we hired Elizabeth Epstein, who later became Mr. Kramer's wife. Ms. Epstein remained in our employ through February 29, 2016. In consideration of services, Ms. Epstein received salary, commission, bonus and 401(k) matching contributions aggregating approximately \$267,500, comprised of base salary of approximately \$147,500, commissions of approximately \$88,500, bonus of approximately \$27,000 and matching contributions to our 401(k) savings plan of approximately \$3,500, in 2014, \$196,000, comprised of base salary of approximately \$175,000, commissions of approximately \$17,500 and matching contributions to our 401(k) savings plan of approximately \$3,500, in 2015 and \$19,000, comprised of base salary net of accrued vacation of approximately \$13,000, bonus of \$5,000 and matching contributions to our 401(k) savings plan of approximately \$1,000, in 2016. In January 2006 we also hired Jim Beckley, the brother of Michael Beckley, who was a member of our board of directors from September 2015 to January 2017. In consideration of services, Jim Beckley received salary, bonus and other compensation aggregating approximately \$103,000, comprised of base salary of approximately \$87,000, bonus of \$2,500, reimbursement of relocation expenses of approximately \$12,000 and reimbursement of insurance costs of approximately \$1,500, in 2014, approximately \$100,000, comprised of base salary of approximately \$92,000 and reimbursement of insurance costs of approximately \$8,000, in 2015, and approximately \$105,500, comprised of base salary of approximately \$94,000, bonus of approximately \$3,500 and reimbursement of insurance costs of approximately \$8,000, in 2016. Amounts paid to Jim Beckley in 2015 and 2016 were paid in Australian dollars and are presented here in U.S. dollars based on the exchange rate on December 31, 2016.

### **Stock Option Grants to Directors and Executive Officers**

We have granted stock options to certain of our directors and executive officers. For more information regarding the stock options and stock awards granted to our directors and named executive officers see "Executive and Director Compensation."

### **Indemnification Agreements**

We have entered into indemnification agreements with each of our directors and executive officers. The indemnification agreements and our amended and restated bylaws require us to indemnify our directors and executive officers to the fullest extent permitted by Delaware law. For more information regarding these agreements, see "Executive and Director Compensation—Limitations on Liability and Indemnification Matters."

### **Related Person Transaction Policy**

In connection with the IPO, we adopted a written related person transaction policy that sets forth our procedures for the identification, review, consideration and approval or ratification of related person transactions. For purposes of our policy only, a related person transaction is a transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships, in which we and any related person are, were or will be participants and in which the amount involved exceeds \$120,000. Transactions involving compensation for services provided to us as an employee or director are not covered by this policy. A related person is any executive officer, director or beneficial owner of more than 5% of any class of our voting securities, including any of their immediate family members and any entity owned or controlled by such persons.

Under the policy, if a transaction has been identified as a related person transaction, including any transaction that was not a related person transaction when originally consummated or any transaction that was

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not initially identified as a related person transaction prior to consummation, our management must present information regarding the related person transaction to our audit committee, or, if audit committee approval would be inappropriate, to another independent body of our board of directors, for review, consideration and approval or ratification. The presentation must include a description of, among other things, the material facts, the interests, direct and indirect, of the related persons, the benefits to us of the transaction and whether the transaction is on terms that are comparable to the terms available to or from, as the case may be, an unrelated third party or to or from employees generally. Under the policy, we will collect information that we deem reasonably necessary from each director, executive officer and, to the extent feasible, significant stockholder to enable us to identify any existing or potential related person transactions and to effectuate the terms of the policy.

In addition, under our Code of Conduct, our employees and directors have an affirmative responsibility to disclose any transaction or relationship that reasonably could be expected to give rise to a conflict of interest.

In considering related person transactions, our audit committee, or other independent body of our board of directors, will take into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event that the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties or to or from employees generally.

The policy requires that, in determining whether to approve, ratify or reject a related person transaction, our audit committee, or other independent body of our board of directors, must consider, in light of known circumstances, whether the transaction is in, or is not inconsistent with, our best interests and those of our stockholders, as our audit committee, or other independent body of our board of directors, determines in the good faith exercise of its discretion.

All of the transactions described above were entered into prior to the adoption of the written policy, but all were approved by our board of directors considering similar factors to those described above.

## PRINCIPAL AND SELLING STOCKHOLDERS

The following table sets forth the beneficial ownership of our common stock as of October 31, 2017 and as adjusted to reflect the sale of Class A common stock offered by the selling stockholders in this offering, for:

- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our Class A common stock or Class B common stock;
- each of our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each of the selling stockholders.

The percentage ownership information shown in the table prior to this offering is based upon 7,206,517 shares of Class A common stock and 53,096,759 shares of Class B common stock outstanding as of October 31, 2017. The percentage ownership information shown in the table after this offering is based upon the number of shares to be issued and outstanding immediately after the consummation of the offering, based on the exercises of options in connection with this offering by selling stockholders and the sale of 3,800,000 shares of Class A common stock by the selling stockholders in the offering.

We have determined beneficial ownership in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities. In addition, the rules include shares of common stock issuable pursuant to the exercise of stock options or warrants that are either immediately exercisable or exercisable on or before December 30, 2017, which is 60 days after October 31, 2017. These shares are deemed to be outstanding and beneficially owned by the person holding those options or warrants for the purpose of computing the percentage ownership of that person, but they are not treated as outstanding for the purpose of computing the percentage ownership of any other person. The information contained in the following table is not necessarily indicative of beneficial ownership for any other purpose, and the inclusion of any shares in the table does not constitute an admission of beneficial ownership of those shares. Unless otherwise indicated, the persons or entities identified in this table have sole voting and investment power with respect to all shares shown as beneficially owned by them, subject to applicable community property laws.

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Except as otherwise noted below, the address for persons listed in the table is c/o Appian Corporation, 11955 Democracy Drive, Suite 1700, Reston, Virginia 20190.

Name of Beneficial Owner	Shares Beneficially Owned Prior to this Offering		Number of Shares Offered	Shares Beneficially Owned After this Offering		Number of Additional Shares to be Sold if Underwriters' Option is Exercised in Full	Shares Beneficially Owned After this Offering if Underwriters' Option is Exercised in Full	
	Shares	Percentage		Shares	Percentage		Shares	Percentage
<b>Principal Stockholders:</b>								
Entities affiliated with Novak Biddle Venture Partners <sup>(1)</sup>								
	11,248,214	18.7%	—	11,248,214	18.7%	—	11,248,214	18.7%
Entities affiliated with New Enterprise Associates <sup>(2)</sup>								
	6,118,418	10.2	2,822,398	3,296,020	5.5	570,000	2,726,020	4.5
Entities affiliated with Abdiel Capital Management, LLC <sup>(3)</sup>								
	3,843,770	6.4	—	3,843,770	6.4	—	3,843,770	6.4
<b>Named Executive Officers and Directors:</b>								
Matthew Calkins <sup>(4)</sup>								
	28,699,612	47.6	250,000	28,449,612	47.2	—	28,449,612	47.2
Mark Lynch <sup>(5)</sup>								
	185,200	*	75,200	110,000	*	—	110,000	*
Edward Hughes <sup>(6)</sup>								
	425,386	*	100,000	325,386	*	—	325,386	*
A.G.W. "Jack" Biddle, III <sup>(1)(7)</sup>								
	11,250,879	18.7	—	11,250,879	18.7	—	11,250,879	18.7
Prashanth "PV" Boccassam <sup>(8)</sup>								
	2,665	*	—	2,665	*	—	2,665	*
Michael G. Devine <sup>(9)</sup>								
	39,046	*	—	39,046	*	—	39,046	*
Barbara "Bobbie" Kilberg <sup>(10)</sup>								
	2,665	*	—	2,665	*	—	2,665	*
Robert C. Kramer <sup>(11)</sup>								
	2,727,000	4.5	82,402	2,644,598	4.4	—	2,644,598	4.4
Michael J. Mulligan <sup>(12)</sup>								
	143,648	*	20,000	123,648	*	—	123,648	*
All current directors and executive officers as a group (9 persons) <sup>(13)</sup>								
	43,476,101	72.1	527,602	42,948,499	70.4	—	42,948,499	70.4
<b>Other Founders::</b>								
Marc Wilson <sup>(14)</sup>								
	2,050,000	3.4	75,000	1,975,000	3.3	—	1,975,000	3.3
Michael Beckley <sup>(15)</sup>								
	2,000,000	3.3	375,000	1,625,000	2.7	—	1,625,000	2.7

\* Represents beneficial ownership of less than 1%.

(1) Includes 9,560,982 shares of Class B common stock held by Novak Biddle Venture Partners V, L.P. and 1,687,232 shares of Class B common stock held by Novak Biddle Company V, LLC. Novak Biddle Company V, LLC is the general partner of Novak Biddle Venture Partners V, L.P. AGW Biddle III, one of our directors, and E. Rogers Novak, Jr. are the managing members of Novak Biddle Company V, LLC and share voting and investment power over the shares held by Novak Biddle Venture Partners V, L.P. The principal business address of Novak Biddle Venture Partners V, L.P. is 7501 Wisconsin Avenue, East Tower, Suite 1380, Bethesda, MD 20814.

(2) Consists of 6,114,338 shares of Class B common stock held by New Enterprise Associates 14, L.P., or NEA 14, and 4,080 shares of Class B common stock held by NEA Ventures 2014, L.P., or Ven 2014. 2,820,516 of such shares of Class B common stock held by NEA 14 and 1,882 of such shares of Class B common stock held by Ven 2014 will be automatically converted into shares of Class A common stock in connection with this offering and are being offered for sale pursuant to the registration statement of which this prospectus is part. The shares directly held by NEA 14 are indirectly held by NEA Partners 14, L.P., or NEA Partners 14, the sole general partner of NEA 14, NEA 14 GP, LTD, or NEA 14 LTD, the sole general partner of NEA Partners 14 and each of the individual directors of NEA 14 LTD. The individual directors of NEA 14 LTD, collectively the NEA 14 Directors, are M. James Barrett, Peter J. Barris, Forest Baskett, Anthony A. Florence, Jr., Patrick J. Kerins, David M. Mott, Scott D. Sandell, Peter Sonsini and Ravi Viswanathan. NEA 14, NEA Partners 14 and NEA 14 LTD and the NEA 14 Directors share voting and dispositive power with regard to our securities directly held by NEA 14. Karen P. Welsh, the general partner of Ven 2014, has voting and dispositive power with regard to our securities directly held by Ven 2014. The principal business address of NEA 14 and Ven 2014 is 1954 Greenspring Drive, Suite 600, Timonium, Maryland 21093.

(3) Consists of 3,707,352 shares of Class A common stock held by Abdiel Qualified Master Fund, LP, or AQMF, and 136,418 shares of Class A common stock held by Abdiel Capital, LP, or ACLP. This information has been obtained from a Schedule 13D/A filed on



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October 26, 2017 by Abdiel Capital Management, LLC, AQMF, ACLP, Abdiel Capital Advisors, LP and Colin T. Moran. Abdiel Capital Management, LLC is the general partner of AQMF and ACLP, and Abdiel Capital Advisors, LP serves as the investment manager of AQMF and ACLP. Colin T. Moran is the managing member of Abdiel Capital Management, LLC and Abdiel Capital Partners, LLC, which is the general partner of Abdiel Capital Advisors, LP. By virtue of the foregoing relationships, each of the reporting persons may be deemed to beneficially own the securities held by AQMF and ACLP. The principal business address of these persons and entities is 401 Park Avenue, Suite 930, New York, New York 10022.

- (4) Consists of 7,174,902 shares of Class B common stock held by Wallingford, LLC, for which Mr. Calkins serves as the managing member, and 21,524,710 shares of Class B common stock held by Calkins Family LLC, for which Mr. Calkins serves as the managing member. Wallingford, LLC has pledged 2,204,586 shares of Class B common stock as security for a loan. 250,000 shares of Class B common stock held by Calkins Family LLC will be automatically converted into shares of Class A common stock in connection with this offering and are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (5) Consists of 185,200 shares of Class B common stock issuable upon the exercise of options. Mr. Lynch exercised 75,200 options and converted the underlying shares of Class B common stock into 75,200 shares of Class A common stock which are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (6) Consists of 425,386 shares of Class B common stock issuable upon the exercise of options. Mr. Hughes exercised 100,000 options and converted the underlying shares of Class B common stock into 100,000 shares of Class A common stock which are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (7) Includes 2,665 shares of Class A common stock held directly by Mr. Biddle.
- (8) Consists of 2,665 shares of Class A common stock held directly by Mr. Boccassam.
- (9) Consists of 3,046 shares of Class A common stock held directly by Mr. Devine and 36,000 shares of Class B common stock issuable upon the exercise of options.
- (10) Consists of 2,665 shares of Class A common stock held directly by Ms. Kilberg.
- (11) Consists of 2,620,000 shares of Class B common stock held by The Robert C. Kramer Revocable Trust, for which Mr. Kramer serves as sole trustee and beneficiary, and 107,000 shares of Class B common stock issuable upon the exercise of options. 82,402 shares of Class B common stock held by The Robert C. Kramer Revocable Trust will be automatically converted into shares of Class A common stock in connection with this offering and are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (12) Consists of 3,046 shares of Class A common stock held directly by Mr. Mulligan and 140,602 shares of Class B common stock issuable upon the exercise of options. Mr. Mulligan exercised 20,000 options and converted the underlying shares of Class B common stock into 20,000 shares of Class A common stock which are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (13) Includes 860,108 shares of Class B common stock issuable upon the exercise of options, 195,200 of which were exercised and the underlying shares of Class B common stock were converted into 195,200 shares of Class A common stock which are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (14) Consists of 1,750,000 shares of Class B common stock held directly by Mr. Wilson and 300,000 shares of Class B common stock held by the Rachael J. Fried Spousal Limited Access Trust Dated December 29, 2016, for which Messrs. Wilson and Beckley serve as trustees. 75,000 shares of the Class B common stock held by Mr. Wilson will be automatically converted into shares of Class A common stock in connection with this offering and are being offered for sale pursuant to the registration statement of which this prospectus is part.
- (15) Consists of 1,400,000 shares of Class B common stock held directly by Mr. Beckley, 300,000 shares of Class B common stock held by the Rachael J. Fried Spousal Limited Access Trust Dated December 29, 2016, for which Messrs. Wilson and Beckley serve as trustees, and 300,000 shares of Class B common stock held by the Marc S. Wilson Spousal Limited Access Trust Dated December 29, 2016, for which Mr. Beckley serves as a trustee. 375,000 shares of the Class B common stock held by Mr. Beckley will be automatically converted into shares of Class A common stock in connection with this offering and are being offered for sale pursuant to the registration statement of which this prospectus is part.

## DESCRIPTION OF CAPITAL STOCK

The following descriptions of our capital stock, certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, and certain provisions of Delaware law are summaries. You should also refer to the amended and restated certificate of incorporation and the amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part. We refer in this section to our amended and restated certificate of incorporation and amended and restated bylaws as our certificate of incorporation and bylaws, respectively.

### General

Our certificate of incorporation provides for two classes of common stock: Class A common stock and Class B common stock.

Our authorized capital stock consists of 600,000,000 shares, all with a par value of \$0.0001 per share, of which:

- 500,000,000 shares are designated as Class A common stock; and
- 100,000,000 shares are designated as Class B common stock

As of September 30, 2017, there were outstanding:

- 7,203,271 shares of Class A common stock held by 9 stockholders;
- 8,000 shares of Class A common stock issuable upon exercise of outstanding options and vesting of outstanding restricted stock units;
- 53,073,459 shares of Class B common stock held by 111 stockholders; and
- 7,375,928 shares of Class B common stock issuable upon exercise of outstanding options.

Our shares of Class A common stock and Class B common stock are not redeemable and have no preemptive rights.

### Class A Common Stock and Class B Common Stock

#### *Voting Rights*

Holders of our Class A common stock and Class B common stock have identical rights, provided that, except as otherwise expressly provided in our certificate of incorporation or required by applicable law, on any matter that is submitted to a vote of our stockholders, holders of our Class A common stock are entitled to one vote per share of Class A common stock and holders of our Class B common stock are entitled to ten votes per share of Class B common stock. Holders of shares of Class A common stock and Class B common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders. In addition, each class of our common stock may have the right to vote separately in certain instances as listed below under “—Economic Rights.”

A separate vote of our Class B common stock will also be required in order for us to, directly or indirectly, take action in the following circumstances:

- if we propose to amend, alter or repeal any provision of our certificate of incorporation or our bylaws that modifies the voting, conversion or other powers, preferences or other special rights or privileges or restrictions of the Class B common stock; or
- if we reclassify any outstanding shares of Class A common stock into shares having rights as to dividends or liquidation that are senior to the Class B common stock or the right to more than one vote for each share thereof.

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Our certificate of incorporation provides that the authorized number of shares of Class A common stock or Class B common stock may be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority of the combined voting power of the outstanding shares of Class A common stock and Class B common stock, voting together as a single class. In addition, except as expressly permitted by the certificate of incorporation we may not issue any shares of Class B common stock, unless that issuance is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class B common stock.

We have not provided for cumulative voting for the election of directors in our certificate of incorporation.

### ***Economic Rights***

Except as otherwise expressly provided in our certificate of incorporation or required by applicable law, shares of Class A common stock and Class B common stock have the same rights and privileges and rank equally, share ratably and are identical in all respects as to all matters, including, without limitation, those described below.

*Dividends.* Any dividend or distribution paid or payable to the holders of shares of Class A common stock and Class B common stock shall be paid pro rata, on an equal priority, pari passu basis, unless different treatment of the shares of any such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of the applicable class of common stock treated adversely, voting separately as a class; provided, however, that if a dividend or distribution is paid in the form of Class A common stock or Class B common stock (or rights to acquire shares of Class A common stock or Class B common stock), then the holders of the Class A common stock may receive Class A common stock (or rights to acquire shares of Class A common stock) and holders of Class B common stock may receive Class B common stock (or rights to acquire shares of Class B common stock).

*Liquidation.* In the event of our liquidation, dissolution or winding-up, upon the completion of the distributions required with respect to any series of preferred stock that may then be outstanding, our remaining assets legally available for distribution to stockholders shall be distributed on an equal priority, pro rata basis to the holders of Class A common stock and Class B common stock unless different treatment is approved by the affirmative vote of the holders of a majority of the outstanding shares of each of the Class A common stock and Class B common stock, voting separately as a class.

*Subdivisions and Combinations.* If we subdivide or combine in any manner outstanding shares of Class A common stock or Class B common stock, then the outstanding shares of all common stock will be subdivided or combined in the same proportion and manner unless different treatment of the shares of such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of the applicable class of common stock treated adversely, voting separately as a class.

*Change of Control Transaction.* The holders of Class A common stock and Class B common stock will be treated equally and identically with respect to shares of Class A common stock or Class B common stock owned by them unless different treatment is approved by the affirmative vote of the holders of a majority of the outstanding shares of each of the Class A common stock and Class B common stock, voting separately as a class, on (a) the closing of the sale, lease, exclusive license or other disposition of all or substantially all of our assets, (b) the consummation of a merger, reorganization, consolidation, or share transfer which results in our capital stock outstanding immediately before the transaction representing less than a majority of the combined voting power of the voting securities of the company or the surviving or acquiring entity, or (c) the closing of the transfer (whether by merger, consolidation, or otherwise but excluding a *bona fide* equity financing), in one transaction or a series of related transactions, to a person or group of affiliated persons of securities of the company if, after closing, the transferee person or group would hold 50% or more of the outstanding voting power of the company (or the surviving or acquiring entity). However, consideration to be paid or received by a

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holder of common stock in connection with any such asset sale, merger, reorganization, consolidation, or share transfer under any employment, consulting, severance, or other arrangement will be disregarded for the purposes of determining whether holders of common stock are treated equally and identically.

### ***Conversion***

Each share of Class B common stock is convertible at any time at the option of the holder into one share of Class A common stock. In addition, each share of Class B common stock will convert automatically into one share of Class A common stock upon (1) any transfer, whether or not for value and whether voluntary or involuntary or by operation of law, except for certain transfers described in our certificate of incorporation, including, without limitation, certain transfers for tax and estate planning purposes or (2) the death or disability, as defined in our certificate of incorporation, of the applicable Class B common stockholder (or nine months after the date of death or disability if the stockholder is one of our founders). In addition, on the first trading day following the date on which the outstanding shares of Class B common stock represent less than 10% of the aggregate voting power of our then outstanding capital stock, all outstanding shares of Class B common stock shall convert automatically into Class A common stock, and no additional shares of Class B common stock will be issued.

### **Options and Restricted Stock Units**

As of September 30, 2017, options to purchase an aggregate of 7,375,928 shares of Class B common stock were outstanding under our 2007 Plan at a weighted-average exercise price of \$6.14 per share, options to purchase an aggregate of 8,000 shares of Class A common stock were outstanding under our 2017 Plan at a weighted-average exercise price of \$20.27 per share and restricted stock units for an aggregate of 42,925 shares of Class A common stock were outstanding under our 2017 Plan. For additional information regarding the terms of our 2007 Plan and 2017 Plan, see “Executive and Director Compensation—Equity Incentive Plans.”

### **Registration Rights**

Certain holders of the Class B common stock, including holders of the shares of our Class B common stock that were issued upon the conversion of our preferred stock, are entitled to certain rights with respect to registration of such shares under the Securities Act pursuant to the terms of an investors’ rights agreement. These shares are collectively referred to herein as registrable securities.

The investors’ rights agreement provides the holders of registrable securities with demand, piggyback and S-3 registration rights as described more fully below. As of September 30, 2017, there was an aggregate of 18,163,158 shares of Class B common stock that were entitled to demand and S-3 registration rights and 18,247,518 shares of Class B common stock that were entitled to piggyback registration rights. Such shares of Class B common stock that were entitled to registration rights under the investors’ rights agreement were converted into shares of Class A common stock and are being offered for sale pursuant to the registration statement of which this prospectus is part.

#### ***Demand Registration Rights***

At any time beginning November 21, 2017, the holders of a majority of the registrable securities then outstanding have the right to make up to two demands that we file a registration statement under the Securities Act covering registrable securities then outstanding having an aggregate offering price of at least \$5.0 million, subject to specified exceptions.

#### ***Piggyback Registration Rights***

If we register any securities for public sale, the holders of our registrable securities then outstanding will each be entitled to notice of the registration and will have the right to include their shares in the registration statement.

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These piggyback registration rights are subject to specified conditions and limitations, including the right of the underwriters of any underwritten offering to limit the number of shares with registration rights to be included in the registration statement, but not below 33% of the total number of securities included in such registration.

### ***Registration on Form S-3***

If we are eligible to file a registration statement on Form S-3, the holders of our registrable securities have the right to demand that we file registration statements on Form S-3; provided, that the aggregate price to the public of the securities to be sold under the registration statement is at least \$1.0 million. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

### ***Expenses of Registration***

We will pay all expenses relating to any demand, piggyback or Form S-3 registration, other than underwriting discounts and commissions, subject to specified conditions and limitations.

### ***Termination of Registration Rights***

The registration rights will terminate five years following the closing of the IPO and, with respect to any particular stockholder, when such stockholder holds less than 1% of our outstanding common stock and is able to sell all of its shares during a 90-day period pursuant to Rule 144 under the Securities Act.

## **Anti-Takeover Provisions**

### ***Anti-Takeover Statute***

We are subject to Section 203 of the Delaware General Corporation Law, which generally prohibits a publicly held Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or after such date, the business combination is approved by the board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least  $66\frac{2}{3}\%$  of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines a “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

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- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation.

### ***Anti-Takeover Effects of Certain Provisions of our Certificate of Incorporation and Bylaws***

Because our stockholders do not have cumulative voting rights, stockholders holding a majority of the voting power of the Class A common stock and Class B common stock outstanding will be able to elect all of our directors. Our certificate of incorporation provides for a two-class common stock structure, which provides our founders, current stockholders, executives and employees with significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.

Our certificate of incorporation and bylaws also provide that:

- the authorized number of directors may be changed by resolution of the board of directors or, prior to the date on which all shares of common stock convert into a single class, by resolution of the stockholders;
- vacancies and newly created directorships on the board of directors may be filled (1) by a majority vote of the directors then serving on the board, even though less than a quorum, except as otherwise required by law or determined by the board, or (2) by the stockholders;
- stockholder action may be taken at a duly called meeting of stockholders or, prior to the date on which all shares of common stock convert into a single class, by written consent;
- a special meeting of stockholders may be called by a majority of our whole board of directors, the chair of our board of directors, our chief executive officer or, prior to the date on which all shares of common stock convert into a single class, the holders of at least 10% of the total voting power of our Class B common stock; and
- stockholders seeking to present proposals before any meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and, subject to applicable law, specify requirements as to the form and content of a stockholder’s notice.

The combination of these provisions will make it more difficult for another party to obtain control of us by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for another party to effect a change in management.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to reduce our vulnerability to hostile takeovers and to discourage certain tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of delaying changes in our control or management. As a consequence, these provisions may also inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts. We believe that the benefits of these provisions, including increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure our company, outweigh the disadvantages of discouraging takeover proposals, because negotiation of takeover proposals could result in an improvement of their terms.

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**Choice of Forum**

Our certificate of incorporation provides that the Court of Chancery of the State of Delaware will be the exclusive forum for any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty owed by any of our directors, officers or employees to us or our stockholders; any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our certificate of incorporation or our bylaws; or any action asserting a claim against us that is governed by the internal affairs doctrine. Our certificate of incorporation also provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Several lawsuits have been filed in Delaware challenging the enforceability of similar choice of forum provisions, and it is possible that a court could determine such provisions are not enforceable.

**Transfer Agent and Registrar**

The transfer agent and registrar for our Class A common stock and Class B common stock is Computershare Trust Company, N.A. The transfer agent's address is 250 Royall Street, Canton, Massachusetts 02021.

**Listing**

Our Class A common stock is listed on the NASDAQ Global Market under the trading symbol "APPN."

## SHARES ELIGIBLE FOR FUTURE SALE

Based on our shares outstanding as of September 30, 2017, upon the closing of this offering, 11,003,271 shares of our Class A common stock and 49,468,659 shares of our Class B common stock will be outstanding, or 11,573,271 shares of Class A common stock and 48,898,659 shares of our Class B common stock if the underwriters exercise their option to purchase additional shares in full.

All of the shares of Class A common stock sold in this offering will be freely tradable without restrictions or further registration under the Securities Act, except for any shares sold to our “affiliates,” as that term is defined under Rule 144 under the Securities Act. The outstanding shares of Class B common stock held by existing stockholders are “restricted securities,” as that term is defined in Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if the offer and sale is registered under the Securities Act or if the offer and sale of those securities qualifies for exemption from registration, including exemptions provided by Rules 144 or 701 promulgated under the Securities Act.

As a result of lock-up agreements and market standoff provisions described below and the provisions of Rules 144 and 701, shares of our common stock will be available for sale in the public market as follows:

- 10,987,500 shares of our Class A common stock will be eligible for immediate sale upon the closing of this offering;
- 338,899 shares of our Class A common stock issuable upon conversion of shares of our Class B common stock will be eligible for sale beginning on November 21, 2017, upon expiration of the lock-up agreements entered into in connection with our IPO described below, subject in certain circumstances to the volume, manner of sale and other limitations under Rule 144 and Rule 701;
- up to one million shares of our Class A common stock issuable upon conversion of shares of our Class B common stock will be eligible for sale following the distribution of such shares from Novak Biddle Venture Partners to their limited partners, which distribution may occur on or after December 8, 2017, subject in certain circumstances to volume, manner of sale and other limitations under Rule 144; and
- 48,145,531 shares of our Class A common stock issuable upon conversion of shares of our Class B common stock will be eligible for sale upon expiration of lock-up agreements described below 90 days after the date of this prospectus, subject in certain circumstances to the volume, manner of sale and other limitations under Rule 144 and Rule 701.

We may issue shares of our capital stock from time to time for a variety of corporate purposes, including in capital-raising activities through future public offerings or private placements, in connection with the exercise of stock options and warrants, vesting of restricted stock units and other issuances relating to our employee benefit plans and as consideration for future acquisitions, investments or other purposes. The number of shares of our capital stock that we may issue may be significant, depending on the events surrounding such issuances. In some cases, the shares we issue may be freely tradable without restriction or further registration under the Securities Act; in other cases, we may grant registration rights covering the shares issued in connection with these issuances, in which case the holders of the shares will have the right, under certain circumstances, to cause us to register any resale of such shares to the public.

### Rule 144

In general, persons who have beneficially owned restricted shares of our common stock for at least six months, and any affiliate of ours who owns either restricted or unrestricted shares of our common stock, are entitled to sell their securities without registration with the SEC under an exemption from registration provided by Rule 144 under the Securities Act.



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### ***Non-Affiliates***

Any person who is not deemed to have been one of our affiliates at the time of, or at any time during the three months preceding, a sale may sell an unlimited number of restricted securities under Rule 144 if:

- the restricted securities have been held for at least six months, including the holding period of any prior owner other than one of our affiliates;
- we have been subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale; and
- we are current in our Exchange Act reporting at the time of sale.

Any person who is not deemed to have been an affiliate of ours at the time of, or at any time during the three months preceding, a sale and has held the restricted securities for at least one year, including the holding period of any prior owner other than one of our affiliates, will be entitled to sell an unlimited number of restricted securities without regard to the length of time we have been subject to Exchange Act periodic reporting or whether we are current in our Exchange Act reporting.

### ***Affiliates***

Persons seeking to sell restricted securities who are our affiliates at the time of, or any time during the three months preceding, a sale, would be subject to the restrictions described above. Sales of restricted or unrestricted shares of our common stock by affiliates are also subject to additional restrictions, by which such person would be required to comply with the manner of sale and notice provisions of Rule 144 and would be entitled to sell within any three-month period only that number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our Class A common stock then outstanding, which will equal 110,000 shares immediately after the closing of this offering based on the number of shares outstanding as of September 30, 2017; or
- the average weekly trading volume of our Class A common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

### **Rule 701**

Rule 701, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with some of the restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, although substantially all of these shares have been registered on Form S-8 as described below.

### **Form S-8 Registration Statements**

We have filed a registration statement on Form S-8 under the Securities Act to register the shares of our common stock that are issuable pursuant to our equity incentive plans, including pursuant to outstanding options and restricted stock units. See “Executive and Director Compensation—Equity Incentive Plans” for a description of our equity incentive plans. Shares covered by this registration statement are eligible for sale in the public markets, subject to vesting restrictions, any applicable lock-up agreements described below and Rule 144 limitations applicable to affiliates.

### **Lock-Up Agreements**

In connection with this offering, we, our directors and officers, and all of the selling stockholders agreed, subject to certain exceptions, not to offer, sell, or transfer any Class A common stock or securities convertible

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into or exchangeable for our Class A common stock for 90 days after the date of this prospectus without the prior written consent of Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC on behalf of the underwriters.

In connection with our IPO, we, our directors and officers, and the holders of all of our common stock and substantially all of our option holders outstanding immediately prior to the IPO, agreed, subject to certain exceptions, not to offer, sell, or transfer any Class A common stock or securities convertible into or exchangeable for our Class A common stock until November 21, 2017, without the prior written consent of Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC on behalf of the underwriters. Such prior written consent was provided to permit the selling stockholders to sell the shares of Class A common stock being offered hereunder.

The agreements do not contain any pre-established conditions to the waiver by Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC on behalf of the underwriters of any terms of the lock-up agreements. Any determination to release shares subject to the lock-up agreements would be based on a number of factors at the time of determination, including but not necessarily limited to the market price of the Class A common stock, the liquidity of the trading market for the Class A common stock, general market conditions, the number of shares proposed to be sold and the timing, purpose and terms of the proposed sale.

In addition to the restrictions contained in the lock-up agreements described above, we have entered into agreements with certain of our security holders, including our investors' rights agreement and agreements governing our equity awards, that contain market stand-off provisions imposing restrictions on the ability of such security holders to offer, sell or transfer our equity securities for a period of 180 days following the date of the IPO prospectus.

### **Registration Rights**

Upon the closing of this offering, the holders of 15,425,120 shares of our Class B common stock are entitled to certain rights with respect to the registration of the offer and sale of their shares under the Securities Act. Registration of the offer and sale of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See "Description of Capital Stock—Registration Rights" for additional information.

## MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a general discussion of the material U.S. federal income tax consequences of the acquisition, ownership and disposition of our Class A common stock by “Non-U.S. Holders” (as defined below). This discussion is for general information purposes only and does not consider all aspects of U.S. federal income taxation that may be relevant to particular Non-U.S. Holders in light of their individual circumstances or to certain types of Non-U.S. Holders subject to special tax rules, including partnerships or other pass-through entities for U.S. federal income tax purposes, banks, financial institutions or other financial services entities, broker-dealers, insurance companies, tax-exempt organizations, pension plans, real estate investment trusts, regulated investment companies, controlled foreign corporations, passive foreign investment companies, corporations that accumulate earnings to avoid U.S. federal income tax, persons who use or are required to use mark-to-market accounting, persons that hold our shares as part of a “straddle,” a “hedge,” a “conversion transaction,” “synthetic security”, integrated investment or other risk reduction strategy, certain former citizens or permanent residents of the United States, persons who hold or receive shares of our Class A common stock pursuant to the exercise of an employee stock option or otherwise as compensation, persons that own, or are deemed to own, more than 5% of our Class A common stock (except to the extent specifically set forth below), persons that own, or are deemed to own, our Class B common stock, or investors in pass-through entities (or entities that are treated as disregarded entities for U.S. federal income tax purposes). In addition, this discussion does not address the effects of any applicable gift or estate tax, the potential application of the alternative minimum tax, or any tax considerations that may apply to Non-U.S. Holders of our Class A common stock under state, local or non-U.S. tax laws and any other U.S. federal tax laws.

This discussion is based on the Internal Revenue Code of 1986, as amended, or the Code, and applicable Treasury Regulations promulgated thereunder and rulings, administrative pronouncements and judicial decisions that are issued and available as of the date of this registration statement, all of which are subject to change or differing interpretations at any time with possible retroactive effect. We have not sought, and will not seek, any ruling from the Internal Revenue Service, or the IRS, with respect to the tax consequences discussed herein, and there can be no assurance that the IRS will not take a position contrary to the tax consequences discussed below or that any position taken by the IRS would not be sustained. This discussion is limited to a Non-U.S. Holder who will hold our Class A common stock as a capital asset within the meaning of the Code (generally, property held for investment). For purposes of this discussion, the term “Non-U.S. Holder” means a beneficial owner of our shares that is not a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) and is not, for U.S. federal income tax purposes, any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation) created or organized in the United States or under the laws of the United States or of any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust if (1) a court within the United States can exercise primary supervision over the trust’s administration and one or more U.S. persons have the authority to control all of the trust’s substantial decisions or (2) the trust has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a U.S. person.

If a partnership (or entity or arrangement treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of our Class A common stock, the tax treatment of such partnership and a partner in such partnership generally will depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our shares, you should consult your tax advisor regarding the tax consequences of the purchase, ownership, and disposition of our Class A common stock.

**THIS SUMMARY IS NOT INTENDED TO BE TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL**

**INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR CLASS A COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.**

**Distributions on Our Class A Common Stock**

In general, subject to the discussion below under the headings “Information Reporting and Backup Withholding” and “Foreign Accounts,” distributions, if any, paid on our Class A common stock to a Non-U.S. Holder (to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles) will constitute dividends and be subject to U.S. withholding tax at a rate equal to 30% of the gross amount of the dividend, or a lower rate prescribed by an applicable income tax treaty, unless the dividends are effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States. Any distribution not constituting a dividend (because such distribution exceeds our current and accumulated earnings and profits) will be treated first as reducing the Non-U.S. Holder’s basis in its shares of Class A common stock, but not below zero, and to the extent it exceeds the Non-U.S. Holder’s basis, as capital gain from the sale or exchange of such shares of Class A Common Stock (see “Gain on Sale, Exchange or Other Taxable Disposition of Class A Common Stock” below).

A Non-U.S. Holder who claims the benefit of an applicable income tax treaty generally will be required to satisfy certain certification and other requirements prior to the distribution date. Such Non-U.S. Holders must generally provide us and/or our paying agent, as applicable, with a properly executed IRS Form W-8BEN or IRS Form W-8BEN-E (or other appropriate form) claiming an exemption from or reduction in withholding under an applicable income tax treaty. Such certificate must be provided before the payment of dividends and must be updated periodically. If a Non-U.S. Holder holds Class A common stock through a financial institution or other agent acting on the Non-U.S. Holder’s behalf, the Non-U.S. Holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through intermediaries. If tax is withheld in an amount in excess of the amount applicable under an income tax treaty, a refund of the excess amount may generally be obtained by a Non-U.S. Holder by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under an applicable income tax treaty.

Dividends that are effectively connected with a Non-U.S. Holder’s conduct of a U.S. trade or business (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder) generally will not be subject to U.S. federal withholding tax if the Non-U.S. Holder files the required forms, including IRS Form W-8ECI, with us and/or our paying agent, as applicable, but instead generally will be subject to U.S. federal income tax on a net income basis at regular graduated rates in the same manner as if the Non-U.S. Holder were a resident of the United States. A corporate Non-U.S. Holder that receives effectively connected dividends may be subject to an additional branch profits tax at a rate of 30%, or a lower rate prescribed by an applicable income tax treaty.

**Gain on Sale, Exchange or Other Disposition of Our Class A Common Stock**

In general, subject to the discussion below under the headings “Information Reporting and Backup Withholding” and “Foreign Accounts,” a Non-U.S. Holder will not be subject to U.S. federal income tax or withholding tax on any gain realized upon such holder’s sale, exchange or other disposition of shares of our Class A common stock unless:

- (1) the gain is effectively connected with a trade or business carried on by the Non-U.S. Holder within the United States (and, if required by an applicable income tax treaty, attributable to a U.S. permanent establishment or fixed base of the Non-U.S. Holder);
- (2) the Non-U.S. Holder is an individual who is present in the United States for 183 days or more in the taxable year of disposition and certain other conditions are met; or

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- (3) we are or have been a “United States real property holding corporation” for U.S. federal income tax purposes at any time during the shorter of the five-year period ending on the date of disposition or the period that the Non-U.S. Holder held the Class A common stock, and, in the case where shares of our Class A common stock are regularly traded on an established securities market, the Non-U.S. Holder owns, or is treated as owning, more than 5% of our Class A common stock at any time during the foregoing period.

Net gain realized by a Non-U.S. Holder described in clause (1) above generally will be subject to U.S. federal income tax in the same manner as if the Non-U.S. Holder were a resident of the United States. Any gains of a corporate Non-U.S. Holder described in clause (1) above may also be subject to an additional “branch profits tax” at a 30% rate, or such lower rate as may be specified by an applicable income tax treaty.

Gain realized by an individual Non-U.S. Holder described in clause (2) above will be subject to a flat 30% tax, or such lower rate specified in an applicable income tax treaty, which gain may be offset by U.S. source capital losses, even though the individual is not considered a resident of the United States.

For purposes of clause (3) above, a corporation is a United States real property holding corporation, or USRPHC, if the fair market value of its United States real property interests equals or exceeds 50% of the sum of the fair market value of its United States real property interests, the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. We believe that we are not, and we do not anticipate that we will become, a USRPHC. However, because the determination of whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our other business assets, there can be no assurance that we will not become a USRPHC in the future. Even if we became a USRPHC, a Non-U.S. Holder would not be subject to U.S. federal income tax on a sale, exchange or other taxable disposition of our Class A common stock by reason of our status as a USRPHC so long as our Class A common stock is regularly traded on an established securities market (within the meaning of the applicable regulations) and such Non-U.S. Holder does not own and is not deemed to own (directly, indirectly or constructively) more than 5% of our outstanding Class A common stock at any time during the shorter of the five-year period ending on the date of disposition and such holder’s holding period. However, no assurance can be provided that our Class A common stock will be regularly traded on an established securities market for purposes of the rules described above. If we are a U.S. real property holding corporation and either our Class A common stock is not regularly traded on an established securities market or a Non-U.S. Holder holds or is deemed to hold (directly, indirectly or constructively) more than 5% of our outstanding Class A common stock during the applicable testing period, such Non-U.S. Holder’s proceeds received on the disposition of shares will generally be subject to withholding at a rate of 15% and such Non-U.S. Holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

### **Information Reporting and Backup Withholding**

Generally, we must report annually to the IRS and to each Non-U.S. Holder the amount of dividends paid, the name and address of the recipient, and the amount, if any, of tax withheld. These information reporting requirements apply even if withholding was not required because the dividends were effectively connected with the Non-U.S. Holder’s conduct of a trade or business within the United States or withholding was reduced by an applicable income tax treaty. Under applicable income tax treaties or other agreements, the IRS may make its reports available to the tax authorities in the Non-U.S. Holder’s country of residence or country in which the Non-U.S. Holder was established.

Dividends paid to a Non-U.S. Holder that is not an exempt recipient generally will be subject to backup withholding, currently at a rate of 28%, unless the Non-U.S. Holder certifies to the payor as to its foreign status, which certification may generally be made on an applicable IRS Form W-8.

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Proceeds from the sale or other disposition of Class A common stock by a Non-U.S. Holder effected by or through a U.S. office of a broker will generally be subject to information reporting and backup withholding, currently at a rate of 28%, unless the Non-U.S. Holder certifies to the withholding agent under penalties of perjury as to, among other things, its name, address and status as a Non-U.S. Holder or otherwise establishes an exemption. Payment of disposition proceeds effected outside the United States by or through a non-U.S. office of a non-U.S. broker generally will not be subject to information reporting or backup withholding if the payment is not received in the United States. Information reporting, but generally not backup withholding, will apply to such a payment if the broker has certain connections with the United States unless the broker has documentary evidence in its records that the beneficial owner thereof is a Non-U.S. Holder and specified conditions are met or an exemption is otherwise established.

Backup withholding is not an additional tax. Any amount withheld under the backup withholding rules from a payment to a Non-U.S. Holder that results in an overpayment of taxes generally will be refunded, or credited against the holder's U.S. federal income tax liability, if any, provided that the required information is timely furnished to the IRS.

### **Foreign Accounts**

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a 30% withholding tax on dividends on, and gross proceeds from the sale or disposition of, our Class A common stock if paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," the foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is a "non-financial foreign entity," the foreign entity identifies certain direct and indirect U.S. holders of debt or equity interests in such foreign entity or certifies that there are none or (iii) the foreign entity is otherwise exempt from FATCA.

Withholding under FATCA generally (1) applies to payments of dividends on our Class A common stock and (2) will apply to payments of gross proceeds from a sale or other disposition of our Class A common stock made after December 31, 2018. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this section. Under certain circumstances, a Non-U.S. Holder may be eligible for refunds or credits of the tax. Non-U.S. Holders should consult their own tax advisors regarding the possible implications of FATCA on their investment in our Class A common stock.

## UNDERWRITING

Under the terms and subject to the conditions in an underwriting agreement dated the date of this prospectus, the underwriters named below, for whom Morgan Stanley & Co. LLC, Goldman Sachs & Co. LLC and Barclays Capital Inc. are acting as representatives, have severally agreed to purchase, and the selling stockholders have agreed to sell to them, severally, the number of shares of Class A common stock indicated below:

<u>Name</u>	<u>Number of Shares of Class A Common Stock</u>
Morgan Stanley & Co. LLC	
Goldman Sachs & Co. LLC	
Barclays Capital Inc.	
William Blair & Company, L.L.C.	
Canaccord Genuity Inc.	
KeyBanc Capital Markets Inc.	
Cowen and Company, LLC	
SunTrust Robinson Humphrey, Inc.	
BTIG, LLC	
Total	<u>3,800,000</u>

The underwriters and the representatives are collectively referred to as the “underwriters” and the “representatives,” respectively. The underwriters are offering the shares of Class A common stock subject to their acceptance of the shares from the selling stockholders and subject to prior sale. The underwriting agreement provides that the obligations of the several underwriters to pay for and accept delivery of the shares of Class A common stock offered by this prospectus are subject to the approval of certain legal matters by their counsel and to certain other conditions. The underwriters are obligated to take and pay for all of the shares of Class A common stock offered by this prospectus if any such shares are taken. However, the underwriters are not required to take or pay for the shares covered by the underwriters’ option to purchase additional shares described below. The underwriting agreement also provides that if an underwriter defaults, the purchase commitment of non-defaulting underwriters may be increased or the offering terminated.

The underwriters initially propose to offer part of the shares of Class A common stock directly to the public at the offering price listed on the cover page of this prospectus and part to certain dealers. After the initial offering of the shares of Class A common stock, the offering price and other selling terms may from time to time be varied by the representatives.

The selling stockholders have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase up to 570,000 additional shares of Class A common stock at the public offering price listed on the cover page of this prospectus, less underwriting discounts and commissions. To the extent the option is exercised, each underwriter will become obligated, subject to certain conditions, to purchase about the same percentage of the additional shares of Class A common stock as the number listed next to the underwriter’s name in the preceding table bears to the total number of shares of Class A common stock listed next to the names of all underwriters in the preceding table.

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The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to the selling stockholders. These amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase up to an additional 570,000 shares of Class A common stock from the selling stockholders.

	Per Share	Total	
		No Exercise	Full Exercise
Public offering price	\$	\$	\$
Underwriting discounts and commissions to be paid by the selling stockholders	\$	\$	\$
Proceeds, before expenses, to the selling stockholders	\$	\$	\$

The estimated offering expenses payable by us, exclusive of the underwriting discounts and commissions, are approximately \$600,000. We have agreed to reimburse the underwriters for expenses relating to clearance of this offering with the Financial Industry Regulatory Authority up to \$30,000. The underwriters have agreed to reimburse us for certain expenses incurred by us in connection with this offering.

The underwriters have informed us that they do not intend sales to discretionary accounts to exceed 5% of the total number of shares of common stock offered by them.

Our Class A common stock is listed on the NASDAQ Global Market under the trading symbol "APPN."

We, our directors and officers and all of the selling stockholders have agreed that, without the prior written consent of Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC on behalf of the underwriters, we and they will not, during the period ending 90 days after the date of this prospectus (the "restricted period"):

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock;
- file any registration statement with the Securities and Exchange Commission relating to the offering of any shares of common stock or any securities convertible into or exercisable or exchangeable for common stock; or
- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock,

whether any such transaction described above is to be settled by delivery of common stock or such other securities, in cash or otherwise. In addition, we and each such person agrees that, without the prior written consent of Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC on behalf of the underwriters, we or such other person will not, during the restricted period, make any demand for, or exercise any right with respect to, the registration of any shares of common stock or any security convertible into or exercisable or exchangeable for common stock.

The restrictions described in the immediately preceding paragraph to do not apply to:

- the sale of shares to the underwriters;
- the issuance by us of shares of common stock upon the exercise of an option or warrant or other convertible security outstanding on the date of this prospectus; *provided* that no public reports or filings reporting the transaction shall be required or shall be voluntarily made in respect of the issuance during the first 30 days of the restricted period and for any issuance thereafter any public reports or filings reporting the transaction that shall be required or shall be voluntarily made in respect of the issuance during the remainder of the restricted period shall include an appropriate footnote clearly indicating that the filing relates to the exercise of a stock option, that no shares were sold by the reporting person and that the shares received upon exercise of the stock option are subject to a lock-up;



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- the approval of by us or the establishment of trading plans by our stockholders pursuant to Rule 10b5-1 under the Exchange Act, for the transfer of shares of common stock by our stockholders; provided that such plan does not provide for the transfer of common stock during the restricted period and to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the holder or us regarding the establishment of such plan, such announcement or filing shall include a statement to the effect that no transfer of common stock may be made under such plan during the restricted period;
- transactions relating to shares of our common stock acquired in open market transactions after the completion of this offering;
- transfers as bona fide gifts or to a trust;
- transfers to current or former partners (general or limited), members or managers of one of our stockholders or to the estates of one of our stockholders or their affiliates, partners, members or managers;
- transfers pursuant to qualified domestic orders or in connection with divorce settlements;
- transfers by our stockholders to us pursuant to arrangements under which we have an option to repurchase shares of our common stock or a right of first refusal with respect to the transfer of such shares;
- the conversion of outstanding shares of our preferred stock into shares of our common stock; or
- the sale or issuance or entry into an agreement providing for the issuance by us of shares of our common stock or any security convertible into or exercisable for shares of our common stock in connection with the acquisition by us of one or more business, technologies, properties or assets (whether by means of merger, stock purchase, asset purchase or otherwise), and the issuance of any such securities pursuant to any such agreement; provided, that the aggregate number of shares of our common stock that we may sell or issue or agree to sell or issue shall not exceed 5% of the total number of shares of our common stock issued and outstanding on the date immediately following the completion of this offering (as well as any issuance and sale of any option exercised by the underwriters); and provided further, that any such securities issued shall be subject to transfer restrictions substantially similar to those applicable to our stockholders.

Morgan Stanley & Co. LLC and Goldman Sachs & Co. LLC, in their sole discretion, may release the common stock and other securities subject to the lock-up agreements described above in whole or in part at any time.

In order to facilitate the offering of the common stock, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock. Specifically, the underwriters may sell more shares than they are obligated to purchase under the underwriting agreement, creating a short position. A short sale is covered if the short position is no greater than the number of shares available for purchase by the underwriters under the option. The underwriters can close out a covered short sale by exercising the option or purchasing shares in the open market. In determining the source of shares to close out a covered short sale, the underwriters will consider, among other things, the open market price of shares compared to the price available under the option. The underwriters may also sell shares in excess of the option, creating a naked short position. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in this offering. As an additional means of facilitating this offering, the underwriters may bid for, and purchase, shares of common stock in the open market to stabilize the price of the common stock. These activities may raise or maintain the market price of the common stock above independent market levels or prevent or retard a decline in the market price of the common stock. The underwriters are not required to engage in these activities and may end any of these activities at any time.

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We, the selling stockholders and the underwriters have agreed to indemnify each other against certain liabilities, including liabilities under the Securities Act.

A prospectus in electronic format may be made available on websites maintained by one or more underwriters, or selling group members, if any, participating in this offering. The representatives may agree to allocate a number of shares of common stock to underwriters for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters that may make Internet distributions on the same basis as other allocations.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. Certain of the underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various financial advisory and investment banking services for us, for which they received or will receive customary fees and expenses.

In addition, in the ordinary course of their various business activities, the underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve our securities and instruments. The underwriters and their respective affiliates may also make investment recommendations or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long or short positions in such securities and instruments.

### **Selling Restrictions**

#### ***Canada***

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

#### ***European Economic Area***

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State") an offer to the public of any shares of our common stock may not

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be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of any shares of our common stock may be made at any time under the following exemptions under the Prospectus Directive, if they have been implemented in that Relevant Member State:

- (a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (b) to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150, natural or legal persons (other than qualified investors as defined in the Prospectus Directive), as permitted under the Prospectus Directive, subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Article 3(2) of the Prospectus Directive, provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an “offer to the public” in relation to any shares of our common stock in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares of our common stock to be offered so as to enable an investor to decide to purchase any shares of our common stock, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression “Prospectus Directive” means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State, and the expression “2010 PD Amending Directive” means Directive 2010/73/EU.

### ***United Kingdom***

Each underwriter has represented and agreed that:

- (a) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the Financial Services and Markets Act 2000 (“FSMA”) received by it in connection with the issue or sale of the shares of our common stock in circumstances in which Section 21(1) of the FSMA does not apply to us; and
- (b) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares of our common stock in, from or otherwise involving the United Kingdom.

### ***Hong Kong***

Shares of our common stock may not be offered or sold by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), or (ii) to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a “prospectus” within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), and no advertisement, invitation or document relating to shares of our common stock may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the laws of Hong Kong) other than with respect to shares of our common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder.

**Japan**

No registration pursuant to Article 4, paragraph 1 of the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948, as amended) (the “FIEL”) has been made or will be made with respect to the solicitation of the application for the acquisition of the shares of common stock.

Accordingly, the shares of common stock have not been, directly or indirectly, offered or sold and will not be, directly or indirectly, offered or sold in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan) or to others for re-offering or re-sale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan except pursuant to an exemption from the registration requirements, and otherwise in compliance with, the FIEL and the other applicable laws and regulations of Japan.

*For Qualified Institutional Investors (“QII”)*

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a “QII only private placement” or a “QII only secondary distribution” (each as described in Paragraph 1, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred to QIIs.

*For Non-QII Investors*

Please note that the solicitation for newly-issued or secondary securities (each as described in Paragraph 2, Article 4 of the FIEL) in relation to the shares of common stock constitutes either a “small number private placement” or a “small number private secondary distribution” (each as is described in Paragraph 4, Article 23-13 of the FIEL). Disclosure regarding any such solicitation, as is otherwise prescribed in Paragraph 1, Article 4 of the FIEL, has not been made in relation to the shares of common stock. The shares of common stock may only be transferred en bloc without subdivision to a single investor.

**Singapore**

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of shares of our common stock may not be circulated or distributed, nor may the shares of our common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the “SFA”), (ii) to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where shares of our common stock are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries’ rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired shares of our common stock under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

## LEGAL MATTERS

The validity of the shares of Class A common stock being offered by this prospectus will be passed upon for us by Cooley LLP, Reston, Virginia. Wilson Sonsini Goodrich & Rosati, Professional Corporation, Washington, District of Columbia, is representing the underwriters in connection with this offering.

## EXPERTS

The consolidated financial statements as of December 31, 2015 and 2016 and for each of the three years in the period ended December 31, 2016 included in this Prospectus and in the Registration Statement have been so incorporated in reliance on the report of BDO USA, LLP, an independent registered public accounting firm, appearing elsewhere herein and in the Registration Statement, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND ADDITIONAL INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of Class A common stock being offered by this prospectus, which constitutes a part of the registration statement. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the Class A common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the internet at the SEC's website at [www.sec.gov](http://www.sec.gov). You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, N.E., Washington, D.C. 20549. You may also obtain copies of these documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

We are subject to the information reporting requirements of the Exchange Act, and we file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information are available for inspection and copying at the public reference room and web site of the SEC referred to above. We also maintain a website at [www.appian.com](http://www.appian.com), at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. **However, the information contained in or accessible through our website is not part of this prospectus or the registration statement of which this prospectus forms a part, and investors should not rely on such information in making a decision to purchase our Class A common stock in this offering.**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

Board of Directors  
Appian Corporation  
Reston, Virginia

We have audited the accompanying consolidated balance sheets of Appian Corporation and its subsidiaries as of December 31, 2015 and 2016 and the related consolidated statements of operations, comprehensive loss, changes in stockholders' deficit, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Appian Corporation and its subsidiaries at December 31, 2015 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

/s/ BDO USA, LLP  
McLean, Virginia

February 17, 2017

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**  
*(in thousands, except share and per share data)*

	As of December 31,	
	2015	2016
<b>Assets</b>		
Current assets		
Cash and cash equivalents	\$ 31,393	\$ 31,143
Accounts receivable, net of allowance of \$400	34,228	46,814
Deferred commissions, current	5,316	7,146
Prepaid expenses and other current assets	2,030	3,281
Total current assets	72,967	88,384
Property and equipment, net	2,892	3,101
Deferred commissions, net of current portion	7,354	10,860
Deferred tax assets	22	12
Other assets	165	381
Total assets	\$ 83,400	\$ 102,738
<b>Liabilities, Convertible Preferred Stock and Stockholders' Deficit</b>		
Current liabilities		
Accounts payable	\$ 2,633	\$ 5,057
Accrued expenses	4,350	2,860
Accrued compensation and related benefits	5,737	9,554
Deferred revenue, current	40,220	52,000
Current portion of long-term debt	—	6,111
Other current liabilities	564	437
Total current liabilities	53,504	76,019
Long-term debt, net of current portion	10,000	13,889
Deferred tax liabilities	916	32
Deferred revenue, net of current portion	12,890	18,108
Preferred stock warrant liability	650	850
Other long-term liabilities	1,415	1,917
Total liabilities	79,375	110,815
Commitments and contingencies (Note 10)		
Convertible preferred stock		
Series A convertible preferred stock—par value \$0.0001; 12,127,468 shares authorized and 12,043,108 shares issued and outstanding as of December 31, 2015 and 2016; liquidation preference of \$17,915 as of December 31, 2016	17,058	17,915
Series B convertible preferred stock—par value \$0.0001; 6,120,050 shares authorized, issued and outstanding as of December 31, 2015 and 2016; liquidation preference of \$37,500 as of December 31, 2016	37,500	37,500
Stockholders' deficit		
Common stock—par value \$0.0001; 61,462,320 shares authorized and 34,274,718 shares issued and outstanding as of December 31, 2015 and 2016	3	3
Additional paid-in capital	—	—
Accumulated other comprehensive income	971	1,330
Accumulated deficit	(51,507)	(64,825)
Total stockholders' deficit	(50,533)	(63,492)
Total liabilities, convertible preferred stock and stockholders' deficit	\$ 83,400	\$ 102,738

*The accompanying notes are an integral part of these consolidated financial statements.*



**APIAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
*(in thousands, except share and per share data)*

	Year Ended December 31,		
	2014	2015	2016
Revenue:			
Subscriptions, software and support	\$ 37,076	\$ 53,207	\$ 69,972
Professional services	51,920	57,997	62,951
Total revenue	<u>88,996</u>	<u>111,204</u>	<u>132,923</u>
Cost of revenue:			
Subscriptions, software and support	4,273	6,079	7,437
Professional services	32,524	42,402	42,686
Total cost of revenue	<u>36,797</u>	<u>48,481</u>	<u>50,123</u>
Gross profit	52,199	62,723	82,800
Operating expenses:			
Sales and marketing	29,088	38,300	54,137
Research and development	13,488	16,750	22,994
General and administrative	23,373	12,515	17,039
Total operating expenses	<u>65,949</u>	<u>67,565</u>	<u>94,170</u>
Operating loss	(13,750)	(4,842)	(11,370)
Other expense:			
Other expense, net	2,086	1,579	1,792
Interest expense	19	188	982
Total other expense	<u>2,105</u>	<u>1,767</u>	<u>2,774</u>
Net loss before income taxes	(15,855)	(6,609)	(14,144)
Income tax expense (benefit)	1,204	378	(1,683)
Net loss	(17,059)	(6,987)	(12,461)
Accretion of dividends on convertible preferred stock	856	861	857
Net loss attributable to common stockholders	<u>\$ (17,915)</u>	<u>\$ (7,848)</u>	<u>\$ (13,318)</u>
Net loss per share attributable to common stockholders:			
Basic and diluted	\$ (0.50)	\$ (0.23)	\$ (0.39)
Weighted average common shares outstanding:			
Basic and diluted	35,717,803	34,274,718	34,274,718

*The accompanying notes are an integral part of these consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**  
*(in thousands)*

	<u>Year Ended December 31,</u>		
	<u>2014</u>	<u>2015</u>	<u>2016</u>
Net loss	\$(17,059)	\$(6,987)	\$(12,461)
Other comprehensive income, net of income taxes:			
Foreign currency translation adjustment	812	159	359
Total comprehensive loss, net of income taxes	<u>\$(16,247)</u>	<u>\$(6,828)</u>	<u>\$(12,102)</u>

*The accompanying notes are an integral part of these consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT**  
**(in thousands, except share data)**

	Common Stock		Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Deficit
	Shares	Amount			
Balance, January 1, 2014	40,000,000	\$ 4	\$ —	\$ (4,612)	\$ (4,608)
Net loss	—	—	—	(17,059)	(17,059)
Repurchase and retirement of common stock	(5,725,282)	(1)	—	(21,012)	(21,013)
Accretion of dividends on convertible preferred stock	—	—	—	(856)	(856)
Accretion of issuance costs on convertible preferred stock	—	—	—	(120)	(120)
Other comprehensive income	—	—	812	—	812
Balance, December 31, 2014	34,274,718	3	812	(43,659)	(42,844)
Net loss	—	—	—	(6,987)	(6,987)
Accretion of dividends on convertible preferred stock	—	—	—	(861)	(861)
Other comprehensive income	—	—	159	—	159
Balance, December 31, 2015	34,274,718	3	971	(51,507)	(50,533)
Net loss	—	—	—	(12,461)	(12,461)
Accretion of dividends on convertible preferred stock	—	—	—	(857)	(857)
Other comprehensive income	—	—	359	—	359
Balance, December 31, 2016	34,274,718	\$ 3	\$ 1,330	\$ (64,825)	\$ (63,492)

*The accompanying notes are an integral part of these consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
*(in thousands)*

	<b>Year Ended December 31,</b>		
	<b>2014</b>	<b>2015</b>	<b>2016</b>
<b>Cash flows from operating activities:</b>			
Net loss	\$(17,059)	\$ (6,987)	\$(12,461)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	610	763	764
Bad debt expense (recovery)	30	(22)	7
Deferred income taxes	399	(291)	(1,122)
Fair value adjustment for warrant liability	351	299	200
Changes in assets and liabilities:			
Accounts receivable	(1,450)	(6,639)	(11,154)
Prepaid expenses and other assets	130	(988)	(1,665)
Deferred commissions	(4,486)	(3,965)	(5,335)
Accounts payable and accrued expenses	1,932	1,058	1,287
Accrued compensation and related benefits	1,929	(968)	3,717
Other current liabilities	1,395	(251)	19
Deferred revenue	16,744	15,490	17,410
Other long-term liabilities	1,009	356	577
Net cash provided by (used in) operating activities	1,534	(2,145)	(7,756)
<b>Cash flows from investing activities:</b>			
Purchases of property and equipment	(2,633)	(524)	(984)
Net cash used in investing activities	(2,633)	(524)	(984)
<b>Cash flows from financing activities:</b>			
Proceeds from issuance of long-term debt	—	10,000	20,000
Repayment of long-term debt	—	—	(10,000)
Proceeds from issuance of Series B convertible preferred stock, net of offering costs	37,380	—	—
Repurchase of common stock	(21,013)	—	—
Net cash provided by financing activities	16,367	10,000	10,000
Effect of foreign exchange rate changes on cash and cash equivalents	(912)	(930)	(1,510)
Net increase (decrease) in cash and cash equivalents	14,356	6,401	(250)
Cash and cash equivalents, beginning of year	10,636	24,992	31,393
Cash and cash equivalents, end of year	<u>\$ 24,992</u>	<u>\$31,393</u>	<u>\$ 31,143</u>
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid for interest	\$ —	\$ 193	\$ 895
Cash paid for income taxes	\$ 70	\$ 1,055	\$ 610
<b>Supplemental disclosure of non-cash financing activities:</b>			
Accretion of dividends on convertible preferred stock	\$ 856	\$ 861	\$ 857
Accretion of issuance costs on convertible preferred stock	\$ 120	\$ —	\$ —

*The accompanying notes are an integral part of these consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. Organization and Description of Business**

Appian Corporation (together with its subsidiaries, “Appian,” the “Company,” “we” or “our”) provides a leading low-code software development platform that enables organizations to rapidly develop powerful and unique applications. The applications created on our platform help companies drive digital transformation and competitive differentiation. We were incorporated in the state of Delaware in August 1999. We are headquartered in Reston, Virginia and have offices in Canada, Switzerland, the United Kingdom, France, Germany, the Netherlands, Italy, and Australia.

**2. Significant Accounting Policies**

***Basis of Presentation***

The consolidated financial statements and accompanying notes were prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”).

***Use of Estimates***

The preparation of our consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the amounts reported in these financial statements and accompanying notes. Although we believe that the estimates we use are reasonable, due to the inherent uncertainty involved in making these estimates, actual results reported in future periods could differ from those estimates.

Significant estimates embedded in the consolidated financial statements include revenue recognition, income taxes and the related valuation allowance, stock-based compensation and fair value measurements for our common stock and outstanding warrant.

***Principles of Consolidation***

The accompanying consolidated financial statements include the accounts of Appian and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

***Revenue Recognition***

We generate revenue primarily through sales of subscriptions to our platform, as well as professional services. We recognize revenue when all of the following conditions are met: (1) there is persuasive evidence of an arrangement; (2) the service or product has been provided to the customer; (3) the amount of fees to be paid by the customer is fixed or determinable; and (4) the collection of related fees is reasonably assured. If collection is not reasonably assured, we defer revenue recognition until collectability becomes reasonably assured. Our arrangements do not contain general rights of return. Revenue is recognized net of any taxes collected from customers and subsequently remitted to governmental authorities.

***Subscriptions, Software and Support Revenue***

Subscriptions, software and support revenue is primarily related to (1) software as a service (“SaaS”) subscriptions bundled with maintenance and support and hosting services and (2) term license subscriptions bundled with maintenance and support. To a lesser extent, we also generate revenue from the sale of perpetual software licenses and associated maintenance and support.

Historically, we licensed our software primarily under perpetual licenses, but over time we transitioned from perpetual licenses to subscriptions. As a result, revenue from our perpetual software licenses was 5.0%, 1.9%, and 0.9% of our total revenue for 2014, 2015 and 2016, respectively.

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

We generally charge subscription fees on a per-user basis. We bill customers and collect payment for subscriptions to our platform in advance on a monthly, quarterly or annual basis. In certain instances, we have had customers pay their entire contract up front.

**SaaS Subscriptions**

Our SaaS subscription revenue is derived from customers accessing our cloud offering pursuant to contracts that are generally one to five years in length. We perform all required maintenance and support for our cloud offering and we do not separately charge customers for hosting costs. In these arrangements, our customers do not have the right to take the software on-premises and, as a result, such arrangements are not accounted for within the scope of the software revenue guidance. Revenue from SaaS subscriptions is recognized ratably over the term of the subscription, beginning with the date our service is made available to our customer.

**Term License Subscriptions**

Our term license subscription revenue is derived from customers with on-premises installations of our platform pursuant to contracts that are generally one to five years in length. Customers with term license subscriptions have the right to use our software and receive maintenance and support. Since we do not sell maintenance and support separately from the subscription, revenue for the term license subscription and maintenance and support is recognized ratably over the term of the subscription, upon delivery of the platform to the customer when sold on a standalone basis.

**Perpetual Licenses**

Our perpetual license revenue is derived from customers with perpetual licenses to our platform and associated maintenance and support contracts. We recognize revenue from perpetual licenses on the date of delivery to our customer. We sell maintenance and support to perpetual license customers separately from the perpetual licenses pursuant to agreements that generally renew annually. Maintenance and support revenue is deferred and recognized ratably over the term of the support period.

*Professional Services*

Our professional services revenue is comprised of fees for consulting services, including application development and deployment assistance and training related to our platform. Our professional services are not essential to the functionality of our platform because the platform is ready for the customer's use immediately upon delivery and is not modified or customized in any manner.

Consulting services are billed under both time-and-material and fixed-fee arrangements. For standalone time-and-material contracts, we recognize revenue at contractually agreed upon billing rates applied to hours performed, plus the cost of any materials delivered. For standalone fixed-fee contracts, we also recognize revenue as the work is performed using the proportional performance method of accounting. Training revenue is recognized when the associated training services are delivered. Training is also sold in the form of a subscription arrangement where a customer agrees to pay an annual fixed fee for a fixed number of users to have access to all of our training offerings during the year. Revenue from training subscription agreements is recognized ratably over the subscription period.

We defer recognition of revenue from work performed on pending contract modifications until the period in which the modifications are accepted and funding is approved by the customer. Costs of work performed on pending contract modifications are expensed as incurred.

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

*Multiple Element Arrangements*

Our multiple element arrangements are from SaaS subscriptions, term license subscriptions, and perpetual licenses that are generally sold in combination with maintenance and support service and frequently with professional services.

**SaaS Subscriptions**

For multiple element arrangements involving SaaS subscriptions that include professional services in addition to the subscription to our platform, we evaluate each element to determine whether it represents a separate unit of accounting. Because there are third-party vendors who routinely sell and provide the same professional services to our customers, our professional services are deemed to have standalone value apart from the SaaS subscription. Additionally, we offer both SaaS subscriptions and professional services on a standalone basis. Professional services revenue is therefore accounted for separately from subscription fees and recognized as the professional services are performed. We allocate revenue to the elements based on the selling price hierarchy using vendor-specific objective evidence, or VSOE, of selling price, third-party evidence, or TPE, of selling price, or if neither exists, best estimated selling price, or BEBP. In cases where we do not have VSOE or TPE of the elements of our arrangements, we use BEBP to allocate revenue. We determine BEBP for a service by considering multiple factors including, but not limited to, evaluating the weighted average of actual sales prices and other factors such as gross margin objectives, pricing practices and growth strategy. Pricing practices taken into consideration include historic contractually stated prices, volume discounts where applicable and our price lists. While we believe we can make reliable estimates regarding these matters, these estimates are inherently subjective. Once the revenue is allocated to these elements, revenue is recognized as such services are provided.

**Term License Subscriptions**

For multiple element arrangements involving term license subscriptions, maintenance and support and professional services, we do not have VSOE of fair value for the maintenance and support. Our term license subscriptions are generally not sold on a standalone basis, and therefore, we have not established VSOE of fair value for the subscriptions. Consequently, for our bundled arrangements that include certain professional services, there are two undelivered elements for which VSOE of fair value has not been established and, therefore, we utilize the combined services approach and defer all revenue until the software has been delivered and the provision of all services has commenced. We then recognize the entire fee from the arrangement ratably over the remaining period of the arrangement, assuming all other software revenue recognition criteria have been met.

**Perpetual Licenses**

For multiple element arrangements involving our perpetual software licenses, we allocate revenue to the software license arrangement by determining if VSOE of fair value exists for the undelivered elements, which are usually maintenance and support and professional services. In situations where VSOE of fair value exists for the undelivered elements, we apply the residual method whereby the fees allocated to license revenue are recognized upon delivery, the fees allocated to maintenance and support revenue are recognized over the service period and the fees allocated to professional services and training are recognized as performed. In instances where we lack VSOE of fair value for the undelivered elements, revenue is either deferred until the final element is delivered or recognized ratably over the service period when the only undelivered elements are either professional services or maintenance and support. We have VSOE for maintenance and support elements and professional services elements performed on a time and materials basis. VSOE of fair value is based upon the price charged when the same element is sold separately. In determining VSOE of fair value, we require that a substantial majority of the selling prices fall within a reasonably narrow pricing range. We reassess VSOE annually or more frequently if required.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

***Deferred Revenue***

Deferred revenue primarily consists of amounts billed in advance of revenue recognition from our subscriptions, software, and support and professional services described above. Deferred revenue is recognized as the revenue recognition criteria are met.

***Cost of Revenue***

***Cost of Subscriptions, Software and Support Revenue***

Cost of subscriptions, software and support revenue consists primarily of fees paid to our third-party managed hosting providers and other third-party service providers, personnel costs, including payroll and benefits for our technology operations and customer support teams, and allocated facility costs and overhead.

***Cost of Professional Services Revenue***

Cost of professional services revenue includes all direct and indirect costs to deliver our professional services and training, including employee compensation for our global professional services and training personnel, travel costs, third-party contractor costs and allocated facility costs and overhead.

***Concentration of Credit Risk***

Our financial instruments that are exposed to concentration of credit risk consist primarily of cash and cash equivalents and trade account receivables. Cash deposits may be in excess of insured limits. We believe that the financial institutions that hold our cash deposits are financially sound and, accordingly, minimal credit risk exists with respect to these balances.

With regard to our customers, credit evaluation and account monitoring procedures are used to minimize the risk of loss. We believe that no additional credit risk beyond amounts provided for collection loss are inherent in accounts receivable. Revenue generated from government agencies represented 34.4%, 32.7% and 26.2% of our revenue for the years ended December 31, 2014, 2015 and 2016, respectively, of which the top three federal government agencies generated 22.9%, 20.8% and 17.7% of our revenue for the years ended December 31, 2014, 2015 and 2016, respectively. Additionally, 25.5%, 19.9% and 19.5% of our revenue earned during the years ended December 31, 2014, 2015 and 2016, respectively, was generated from foreign customers.

No individual customer represented more than 10% of accounts receivable at December 31, 2015. One customer accounted for 17.2% of accounts receivable at December 31, 2016.

***Cash and Cash Equivalents***

We consider all highly liquid investments with an original or remaining maturity of three months or less at the date of purchase, as well as overnight repurchase investments, to be cash equivalents.

***Accounts Receivable and Allowance for Doubtful Accounts***

Accounts receivable are stated at realizable value, net of an allowance for doubtful accounts. The allowance for doubtful accounts is based on our assessment of the collectability of accounts. We regularly review the composition of the accounts receivable aging, historical bad debts, changes in payment patterns, customer creditworthiness and current economic trends. If the financial condition of our customers were to deteriorate, resulting in their inability to make required payments, additional provisions for doubtful accounts would be



**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

required and would increase bad debt expense. To date, our allowance and related bad debt write-offs have been nominal. There was no change in the allowance for doubtful accounts from December 31, 2015 to December 31, 2016.

***Deferred Commissions***

Deferred commissions are the incremental costs that are directly associated with subscription agreements with customers and consist of sales commissions paid to our direct sales force. Commissions are considered direct and incremental and as such are deferred and amortized over the terms of the related customer contracts consistent with the related revenue. Amortization of deferred commissions is included in sales and marketing expense in the accompanying consolidated statements of operations. Commission expense was \$3.8 million, \$4.6 million, and \$6.5 million for the years ended December 31, 2014, 2015 and 2016, respectively.

***Property and Equipment***

Property and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Significant additions or improvements extending the useful life of an asset are capitalized, while repairs and maintenance costs which do not significantly improve the related assets or extend their useful lives are charged to expense as incurred.

<u>Asset Category</u>	<u>Useful Life (in years)</u>
Computer software	3
Computer hardware	3
Equipment	5
Office furniture and fixtures	10
Leasehold improvements	Shorter of useful life of assets or lease term

***Impairment of Long-Lived Assets***

Long-lived assets and certain intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount of an asset may not be recoverable through undiscounted cash flows from the use of the assets. If such assets are considered to be impaired, the assets are written down to their estimated fair value. No indicators of impairment were identified for the years ended December 31, 2014, 2015 and 2016.

***Fair Value of Financial Instruments***

The carrying amounts of our cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value as of December 31, 2015 and 2016 because of the relatively short duration of these instruments. The carrying value of our long-term debt approximates fair value given interest rates for similar debt instruments available to the Company.

We use a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires us to use observable inputs when available, and to minimize the use of unobservable inputs when determining fair value. The three tiers are defined as follows:

- **Level 1.** Observable inputs based on unadjusted quoted prices in active markets for identical assets or liabilities;

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

- **Level 2.** Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- **Level 3.** Unobservable inputs for which there is little or no market data, which require us to develop our own assumptions.

*Assets and Liabilities Measured at Fair Value on a Recurring Basis*

We evaluate our financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period. This determination requires significant judgments to be made. The following table summarizes the conclusions reached as of December 31 (in thousands):

	2015	Level 1	Level 2	Level 3
<b>Liabilities:</b>				
Series A convertible preferred stock warrant(1)	\$ 650	—	—	\$ 650
	<u>\$ 650</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 650</u>
<b>Liabilities:</b>				
Series A convertible preferred stock warrant(1)	\$ 850	—	—	\$ 850
	<u>\$ 850</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 850</u>

- (1) In order to determine the fair value of the convertible preferred stock warrant, we used an option pricing model (“OPM”). Significant inputs for the OPM included an estimate of the fair value of the Series A convertible preferred stock, the remaining contractual life of the warrant, an estimate of the timing of a liquidity event, a risk-free rate of interest and an estimate of our stock volatility using the volatilities of guideline peer companies.

*Assets and Liabilities Measured at Fair Value on a Recurring Basis Using Significant Unobservable Inputs*

The following table presents the changes in our Level 3 instruments measured at fair value on a recurring basis during the years ended December 31 (in thousands):

	Series A Convertible Preferred Stock Warrant		
	2014	2015	2016
Balance as of January 1	\$ —	\$ 351	\$ 650
Change in fair value of warrant liability	351	299	200
Balance as of December 31	<u>\$ 351</u>	<u>\$ 650</u>	<u>\$ 850</u>

The fair value of the warrant as of December 31, 2013 was de minimis and therefore not recorded as of January 1, 2014.

**Stock-Based Compensation**

We account for stock-based compensation expense related to stock-based awards based on the estimated fair value of the award on the grant date. We calculate the fair value of stock options using the Black-Scholes OPM.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

For service-based awards, stock-based compensation expense is recognized on a straight-line basis over the requisite service period. For performance-based awards, stock-based compensation expense is recognized using the accelerated attribution method, based on the probability of satisfying the performance condition. For awards that contain market conditions, compensation expense is measured using a Monte Carlo simulation model and recognized using the accelerated attribution method over the derived service period based on the expected market performance as of the grant date.

All of our currently outstanding awards require the satisfaction of both a service condition and a liquidity event condition. The liquidity condition is satisfied upon the occurrence of a qualifying event, defined as a change of control transaction or the effective date of our IPO. No compensation expense will be recognized until the performance condition is achieved, at which time the cumulative compensation expense using the accelerated attribution method from the service start date will be recognized.

As discussed in “—Recent Accounting Pronouncements,” we have elected to early adopt Accounting Standards Update No. 2016-09, which, among other things, permits an entity to make an entity-wide policy election to either (1) estimate the number of awards that are expected to vest or (2) account for forfeitures when they occur. We have elected to account for forfeitures as they occur, rather than estimate expected forfeitures.

***Basic and Diluted Loss per Common Share***

We use the two-class method to compute net loss per common share because we have issued securities, other than common stock, that contractually entitle the holders to participate in dividends and earnings. These participating securities include our convertible preferred stock which have non-forfeitable rights to participate in any dividends declared on our common stock. The two-class method requires earnings for the period to be allocated between common stock and participating securities based upon their respective rights to receive distributed and undistributed earnings.

Under the two-class method, for periods with net income, basic net income per common share is computed by dividing the net income attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Net income attributable to common stockholders is computed by subtracting from net income the portion of current year earnings that the participating securities would have been entitled to receive pursuant to their dividend rights had all of the year’s earnings been distributed. No such adjustment to earnings is made during periods with a net loss, as the holders of the participating securities have no obligation to fund losses.

Diluted net income per common share is computed under the two-class method by using the weighted average number of shares of common stock outstanding, plus, for periods with net income attributable to common stockholders, the potential dilutive effects of stock options and warrants. In addition, we analyze the potential dilutive effect of the outstanding participating securities under the “if-converted” method when calculating diluted earnings per share, in which it is assumed that the outstanding participating securities convert into common stock at the beginning of the period or date of issuance, if later. We report the more dilutive of the approaches (two-class or “if-converted”) as our diluted net income per share during the period.

Due to net losses for the years ended December 31, 2014, 2015 and 2016, basic and diluted loss per share were the same, as the effect of potentially dilutive securities would have been anti-dilutive.

***Income Taxes***

We use the asset and liability method of accounting for income taxes in which deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the consolidated

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

financial statement carrying amounts of existing assets and liabilities and their respective tax bases. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be reversed. We recognize the effect on deferred tax assets and liabilities of a change in tax rates as income and expense in the period that includes the enactment date. A valuation allowance is established if it is more likely than not that all or a portion of the deferred tax asset will not be realized.

Our tax positions are subject to income tax audits by multiple tax jurisdictions throughout the world. We recognize the tax benefit of an uncertain tax position only if it is more likely than not the position is sustainable upon examination by the taxing authority. We measure the tax benefit recognized as the largest amount of benefit which is more likely than not to be realized upon settlement with the taxing authority. We recognize penalties and interest related to unrecognized tax benefits as income tax expense.

We calculate the current and deferred income tax provision based on estimates and assumptions that could differ from the actual results reflected in income tax returns filed in subsequent years and record adjustments based on filed income tax returns when identified. The amount of income taxes paid is subject to examination by U.S. federal, state and foreign tax authorities. The estimate of the potential outcome of any uncertain tax issue is subject to our assessment of relevant risks, facts and circumstances existing at that time. To the extent the assessment of such tax position changes, we record the change in estimate in the period in which we make that determination.

Due to changing economic and political environments in the United States and abroad, we may be impacted by possible tax reform or similar changes in tax law. Specifically, certain proposed changes in the United States may impact the U.S. taxation of our foreign earnings and adversely impact our effective tax rate. However, it is not possible to estimate the impact of such changes at this time and we continue to monitor these changes.

***Segment Reporting***

Operating segments are defined as components of an enterprise for which discrete financial information is available that is evaluated regularly by the chief operating decision maker (“CODM”) for purposes of allocating resources and evaluating financial performance. Our CODM is our chief executive officer, who reviews financial information presented on a companywide basis for purposes of allocating resources and evaluating financial performance. As such, our operations constitute a single operating segment and one reportable segment.

***Foreign Currency***

Our operations located outside of the United States where the local currency is the functional currency are translated into U.S. dollars using the current rate method. Results of operations are translated at the average rate of exchange for the period. Assets and liabilities are translated at the closing rates on the balance sheet date. Gains and losses on translation of these accounts are accumulated and reported as a separate component of stockholders’ deficit and other comprehensive income (loss).

Gains and losses on foreign currency transactions are recognized in the accompanying consolidated statements of operations as a component of other expense, net. Transaction gains and losses from transactions denominated in foreign currencies resulted in net transaction losses of \$1.7 million, \$1.3 million and \$1.5 million for the years ended December 31, 2014, 2015 and 2016, respectively.

***Research and Development***

Research and development expenses include payroll, employee benefits, and other headcount-related costs associated with product development. Our product utilizes a common codebase, whether accessed by customers

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

via the cloud or via an on-premises installation. Since our software is sold and licensed externally, we consider our software as external-use software for purposes of applying the capitalized software development guidance. Product development costs are expensed as incurred until technological feasibility has been established, which we define as the completion of all planning, designing, coding and testing activities that are necessary to establish products that meet design specifications including functions, features and technical performance requirements. We have determined that technological feasibility for our software products is reached shortly before they are released for sale. Costs incurred after technological feasibility is established are not significant, and accordingly we expense all research and development costs when incurred.

***Advertising***

We expense advertising costs as they are incurred. Advertising expenses totaled \$0.5 million for each of the years ended December 31, 2014 and 2015 and \$1.4 million for the year ended December 31, 2016.

***Recent Accounting Pronouncements***

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act (“JOBS Act”). The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this extended transition period and, as a result, we will not adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

***Adopted***

In August 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2014-15, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern* (“ASU 2014-15”), which amends ASC Subtopic 205-40 to provide guidance about management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related disclosures. Specifically, the amendments (1) provide a definition of the term “substantial doubt,” (2) require an evaluation of every reporting period, (3) provide principles for considering the mitigating effect of management’s plans, (4) require certain disclosures when substantial doubt is alleviated as a result of consideration of management’s plans, (5) require an express statement and other disclosures when substantial doubt is not alleviated and (6) require an assessment for a period of one year after the date that financial statements are issued. ASU 2014-15 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-03, *Simplifying the Presentation of Debt Issuance Costs* (“ASU 2015-03”), which simplifies the presentation of debt issuance costs by requiring that such costs be presented in the consolidated balance sheets as a direct deduction from the carrying value of the associated debt instrument, consistent with debt discounts. Subsequent to the issuance of ASU 2015-03, the SEC staff announced that the presentation of debt issuance costs associated with line-of-credit arrangements may be presented as an asset. This announcement was codified by the FASB in ASU No. 2015-15. These ASUs were effective for our year ended December 31, 2016, and their adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-05, *Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement* (“ASU 2015-05”), which provides clarification on whether a cloud computing

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

arrangement includes a software license. If a software license is included, the customer should account for the license consistent with its accounting for other software licenses. If a software license is not included, the arrangement should be accounted for as a service contract. ASU 2015-05 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes (Topic 740)* (“ASU 2015-17”), which requires that all deferred tax assets and liabilities, including any related valuation allowance, be classified as noncurrent on the balance sheet. We elected to early adopt ASU 2015-17 beginning with our year ended December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on our financial condition, results of operations or cash flows.

In March 2016, the FASB issued ASU No. 2016-09, *Improvements to Employee Share-Based Payment Accounting (Topic 718)* (“ASU 2016-09”), which is intended to simplify several aspects of the accounting for share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. We elected to early adopt ASU 2016-09 beginning with our year ended December 31, 2016, and have applied the guidance retrospectively. The adoption of ASU 2016-09 did not have a material impact on our financial condition, results of operations or cash flows.

*Not Yet Adopted*

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-09”), which provides new guidance for revenue recognition. ASU 2014-09 provides that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-09 also requires improved disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of revenue that is recognized. Entities have the option of using either a full retrospective or modified retrospective approach for the adoption of the standard. In March 2016, the FASB issued ASU No. 2016-08, *Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)* (“ASU 2016-08”), which clarifies implementation guidance on principal versus agent considerations in ASU 2014-09. In April 2016, the FASB issued ASU No. 2016-10, *Identifying Performance Obligations and Licensing* (“ASU 2016-10”), which clarifies the identification of performance obligations and the licensing implementation guidance in ASU 2014-09. In addition, in May 2016, the FASB issued ASU No. 2016-12, *Narrow-Scope Improvements and Practical Expedients* (“ASU 2016-12”), which clarifies the guidance on assessing collectibility, presentation of sales taxes, noncash consideration and completed contracts and contract modifications at transition. For public entities, the new standard is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2017. For all other entities, the new standard is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods beginning after December 15, 2019. We intend to avail ourselves of the JOBS Act extended transition period that permits us to defer adoption until January 1, 2019. We are currently evaluating the impact the adoption of these standards will have on our consolidated financial statements.

We currently plan to adopt the new standard using the full retrospective approach; however, the decision regarding the adoption method has not been finalized. Our final determination will depend on a number of factors such as the significance of the impact of the new standard on our financial results, system readiness, including that of software procured from third-party providers, and our ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary.

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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

We are in the initial stages of our evaluation of the impact of the new standard on our accounting policies, processes, and system requirements. We have assigned internal resources in addition to the engagement of third-party service providers to assist in the evaluation. Furthermore, we have made and will continue to make investments in systems to enable timely and accurate reporting under the new standard. While we continue to assess all potential impacts under the new standard there is the potential for significant impacts to the timing of recognition of revenue, particularly term license subscriptions and professional services revenue. We also expect an impact to our accounting for contract acquisition costs, both with respect to the amounts that will be capitalized as well as the period of amortization.

Under current industry-specific software revenue recognition guidance, we have historically concluded that we did not have VSOE of fair value of the undelivered services related to term license subscriptions, and accordingly, have recognized term license subscriptions and related services ratably over the subscription term. Professional services included in an arrangement with subscription revenue has also been recognized ratably over the subscription term. The new standard, which does not retain the concept of VSOE, requires an evaluation of whether term license subscriptions and related services, including professional services, are distinct performance obligations and therefore should be separately recognized at a point in time or over time. Depending on the outcome of our evaluation, the timing of when revenue is recognized could change significantly for term license subscriptions and professional services under the new standard.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* (“ASU 2016-02”), which requires that lessees recognize assets and liabilities for leases with lease terms greater than 12 months in the statement of financial position. ASU 2016-02 also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. The update is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. We are currently evaluating the impact the adoption of ASU 2016-02 will have on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which aims to reduce the existing diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. ASU 2016-15 is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted. We are currently in the process of evaluating the impact of adoption of this standard on our consolidated financial statements.

### 3. Property and Equipment

Property and equipment consisted of the following as of December 31 (in thousands):

	2015	2016
Computer software	\$ 1,562	\$ 1,701
Computer hardware	1,201	1,408
Leasehold improvements	3,555	4,098
Office furniture and fixtures	386	464
Equipment	96	116
	<u>6,800</u>	<u>7,787</u>
Less: accumulated depreciation	<u>(3,908)</u>	<u>(4,686)</u>
Property and equipment, net	<u>\$ 2,892</u>	<u>\$ 3,101</u>

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

Depreciation and amortization expense totaled \$0.6 million for the year ended December 31, 2014 and \$0.8 million for each of the years ended December 31, 2015 and 2016.

#### 4. Debt

##### *Line of Credit*

At December 31, 2015, we had a \$10.0 million revolving line of credit with a lender, expiring in June 2016, which was subsequently amended in June 2016 to extend the maturity date through June 2017. The amount of borrowing available under the credit facility at any time may not exceed 80% of eligible accounts receivable at such time and any amounts borrowed are collateralized by substantially all of our assets. Amounts drawn on the revolving line of credit bear interest at a floating rate of prime plus 0.75%. The agreement contains certain affirmative covenants related to the timely delivery of financial information to the bank and maintaining a liquidity ratio of at least 1.25 to 1, as well as certain customary negative covenants. We were in compliance with all covenants as of December 31, 2016, and would be able to draw up to a maximum of \$3.5 million on the revolving line of credit while maintaining compliance with the liquidity ratio. As of December 31, 2015 and 2016, there were no advances against the line of credit.

##### *Term Loan*

In March 2015, we entered into a collateralized \$10.0 million term loan facility with a lender, maturing in March 2019, and borrowed the full amount under the term loan facility in June 2015. In January 2016, we paid off the outstanding balance of the term loan and simultaneously entered into a collateralized \$20.0 million term loan facility, maturing in January 2020. We borrowed the full amount under the term loan facility in January 2016. Amounts drawn on the term loan bear interest at a floating rate of prime plus 1.25%, or 5.00% as of December 31, 2016. We are required to repay the term loan over 48 months. The first 12 months will be interest-only payments followed by 36 months of monthly amortization payments. We may pay off the entire term loan at any time by paying all outstanding principal, accrued interest, and a prepayment fee of 1% of the amount advanced through month 12, 0.5% during months 13 through 24 and no prepayment fee thereafter. The term loan includes a financial covenant related to our short-term liquidity. We were in compliance with this covenant as of December 31, 2016.

#### 5. Income Taxes

For the years ended December 31, 2014, 2015 and 2016, our net (loss) income before income taxes was comprised of the following (in thousands):

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Domestic	\$(11,026)	\$ 1,079	\$ (4,524)
Foreign	(4,829)	(7,688)	(9,620)
Total	<u>\$(15,855)</u>	<u>\$(6,609)</u>	<u>\$(14,144)</u>



**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

For the years ended December 31, 2014, 2015, and 2016, our income tax expense (benefit) was comprised of the following (in thousands):

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Current:			
Federal	\$ 430	\$ 390	\$ (627)
State	128	62	(200)
Foreign	247	217	266
Total current expense (benefit)	<u>805</u>	<u>669</u>	<u>(561)</u>
Deferred:			
Federal	325	(334)	(922)
State	51	43	(230)
Foreign	23	—	30
Total deferred expense (benefit)	<u>399</u>	<u>(291)</u>	<u>(1,122)</u>
Total income tax expense (benefit)	<u>\$1,204</u>	<u>\$ 378</u>	<u>\$(1,683)</u>

For the years ended December 31, 2014, 2015, and 2016, the provision for income taxes differs from the amount computed by applying the federal statutory income tax rates to our loss before the provision for income taxes, as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
U.S. federal statutory tax rate	34.0%	34.0%	34.0%
State tax expense	(0.8)	(0.9)	1.4
Expense on purchase of common stock	(30.2)	—	—
Foreign rate differential	(7.9)	(29.4)	(17.8)
Nondeductible expenses	(1.5)	(4.1)	(2.3)
Tax credits	3.2	10.0	6.5
Unrecognized tax benefits	(0.5)	(1.8)	(0.2)
Other	(0.5)	(1.9)	(0.2)
Change in valuation allowance	(3.4)	(11.5)	(9.6)
Total	<u>(7.6)%</u>	<u>(5.6)%</u>	<u>11.8%</u>

Deferred tax assets and liabilities reflect the net tax effects of temporary differences between the carrying amount of the assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

As of December 31, 2015 and 2016, significant components of our deferred tax assets and liabilities are as follows (in thousands):

	<u>2015</u>	<u>2016</u>
Deferred tax assets:		
Accrued vacation	\$ 482	\$ 529
Bad debt	157	159
Deferred revenue	3,173	2,176
Deferred rent	603	834
Tax credits	1,381	2,401
Net operating losses	1,289	2,939
Other	209	929
Gross deferred tax assets	7,294	9,967
Less: Valuation allowance	(1,283)	(2,642)
Total deferred tax assets	<u>6,011</u>	<u>7,325</u>
Deferred tax liabilities:		
Depreciation	(491)	(349)
Unbilled receivables	(1,835)	(491)
Prepaid expenses	(4,579)	(6,505)
Total deferred tax liabilities	<u>(6,905)</u>	<u>(7,345)</u>
Net deferred tax liability	<u>\$ (894)</u>	<u>\$ (20)</u>

As of December 31, 2015 and 2016, we had \$0 and \$1.8 million of gross net operating loss (“NOL”) carryforwards for U.S. federal tax purposes, respectively. Federal NOL carryforwards will expire, if unused, in 2036. As of December 31, 2015 and 2016, we had U.S. gross state NOL carryforwards of \$0.1 million and \$1.7 million, respectively. We had tax effected state NOL carryforwards of \$0.1 million as of December 31, 2016. Tax effected state NOL carryforwards as of December 31, 2015 were nominal. U.S. state NOL carryforwards will substantially expire, if unused, in 2036.

Section 382 of the Internal Revenue Code limits the utilization of the NOLs when ownership changes occur, as defined by that section. A number of states have similar state laws that limit utilization of the state NOLs when ownership changes occur. We have performed an analysis of our Section 382 ownership changes and have determined that all federal and U.S state NOLs are available for use as of December 31, 2016.

As of December 31, 2015 and 2016, we had \$1.8 million and \$2.8 million, respectively, of federal tax credit carryforwards which will expire, if unused, in 2036.

As of December 31, 2015 and 2016, we had \$13.3 million and \$23.7 million, respectively, of gross NOL carryforwards for Swiss tax purposes. The NOL carryforwards will expire, if unused, between 2021 and 2023.

The net change during the year in the total valuation allowance was \$1.4 million, driven by the valuation allowance recorded against the U.S. deferred tax assets and the change in the Switzerland deferred tax assets.

Based on our cumulative operating results as of December 31, 2016, three-year cumulative loss, and assessment of our expected future results of operations, we determined that it was not more-likely-than not that we would be able to realize the U.S. deferred tax assets. We recorded a valuation allowance in the fourth quarter of 2016 on the U.S. deferred tax assets. We have evaluated all evidence, both positive and negative, in assessing the likelihood of realizability and the negative evidence outweighed the positive evidence.

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

We continue to maintain a full valuation allowance on the deferred tax assets of our subsidiary in Switzerland as we determined that it was not more likely than not that we would be able to realize a benefit from the NOL at that subsidiary. Based on our cumulative operating results as of December 31, 2016, and assessment of our expected future results of operations, we determined that it was not more-likely-than not that we would be able to realize the deferred tax assets prior to expiration.

We are subject to income taxes in the United States, Australia, Canada, France, Germany, Italy, Netherlands, Switzerland, and United Kingdom.

Any undistributed earnings of our foreign subsidiaries are considered to be indefinitely reinvested; accordingly, no U.S. income taxes have been provided thereon. Upon repatriation of those earnings, if any, we would be subject to U.S. income taxes, net of any applicable foreign tax credits, and foreign withholding taxes. We did not have any undistributed earnings at our foreign subsidiaries as of December 31, 2015 and 2016.

As of December 31, 2015 and 2016, we had unrecognized tax benefits of \$0.4 million, of which the entire portion would affect our effective tax rate if recognized. The following table summarizes the activity related to our unrecognized tax benefit from January 1, 2014 to December 31, 2016 (in thousands):

Balance as of January 1, 2014	\$ 218
Additions for tax positions in current years	68
Additions for tax positions in prior years	—
Reductions due to lapse in statutes of limitations	—
Settlements	—
Balance as of December 31, 2014	286
Additions for tax positions in current years	98
Additions for tax positions in prior years	—
Reductions due to lapse in statutes of limitations	—
Settlements	—
Balance as of December 31, 2015	384
Additions for tax positions in current years	171
Additions for tax positions in prior years	—
Reductions due to lapse in statutes of limitations	(136)
Settlements	—
Balance as of December 31, 2016	<u>\$ 419</u>

We recognize interest and penalties related to uncertain tax positions in income tax expense. During the years ended December 31, 2014, 2015, and 2016, we recognized potential interest and penalties of \$15,000, \$19,000, and \$2,000, respectively, and the cumulative balance of interest and penalties as of December 31, 2015 and 2016 was \$39,000 and \$35,000, respectively.

We anticipate that total unrecognized tax benefits will decrease by approximately \$0.1 million over the next 12 months due to the expiration of certain statutes of limitations.

We file income tax returns in the United States federal jurisdiction and in many state and foreign jurisdictions. The tax years 2011 through 2015 remain open to examination by the major taxing jurisdictions to which we are subject to. We are currently under examination by the Internal Revenue Service for tax year 2014.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

**6. Stock-Based Compensation**

Under the Appian Corporation 2007 Stock Option Plan (the “Plan”), we have reserved shares of common stock for the issuance of stock options to employees, directors, and officers. In July 2016, the Plan was revised to increase the maximum number of shares issuable under the Plan from 4,757,610 to 8,413,770. Of this amount, 1,629,322 shares were available to be issued under the Plan as of December 31, 2016. These shares consist of authorized but unissued or reacquired shares. Options under the Plan may be granted for periods of up to ten years.

Under the Plan, the exercise price of each award is established by the board of directors, but may not be less than the fair market value of a share of our common stock on the grant date. Options generally vest upon the satisfaction of both a service condition and a performance condition. The service condition is satisfied at various rates as determined by us, typically on an annual basis over five years. The performance condition is satisfied upon the occurrence of a qualifying event, defined as a change of control transaction or upon the completion of an IPO.

We estimate the fair value of stock options using the Black-Scholes OPM, which requires the use of subjective assumptions, including the expected term of the option, the current price of the underlying stock, the expected stock price volatility, expected dividend yield and the risk-free interest rate for the expected term of the option. The expected term represents the period of time the stock options are expected to be outstanding. Due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected term of the stock options, we use the simplified method to estimate the expected term for stock options granted to employees and directors. Under the simplified method, the expected term of an option is presumed to be the mid-point between the vesting date and the end of the contractual term. Expected volatility is based on historical volatilities for publicly traded stock of comparable companies over the estimated expected term of the stock options. We assume no dividend yield because dividends are not expected to be paid in the near future on our common stock, which is consistent with our history of not paying dividends on our common stock.

The following table summarizes the assumptions used to estimate the fair value of stock options granted during the years ended December 31:

	2014	2015	2016
Risk-free interest rate	1.8% - 2.1%	1.7% - 1.9%	1.3% - 1.5%
Expected term (in years)	6.5	6.5	6.5
Expected volatility	44.7% - 46.0%	39.7% - 44.4%	40.9% - 42.0%
Expected dividend yield	0%	0%	0%

The following table summarizes the stock option activity for the year ended December 31, 2016:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2016	4,589,988	\$ 2.22	6.0	\$ 24,239
Granted	2,375,080	9.30		
Cancelled	(180,620)	4.22		
Outstanding at December 31, 2016	<u>6,784,448</u>	4.65	6.5	44,259
Exercisable at December 31, 2016	<u>—</u>	\$ —	—	\$ —

The weighted average grant-date fair value of options granted was \$1.81, \$2.61, and \$4.35 per share during the years ended December 31, 2014, 2015, and 2016, respectively.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

All of our currently outstanding awards require the satisfaction of both a service condition and a liquidity event condition. The liquidity condition is satisfied upon the occurrence of a qualifying event, defined as a change of control transaction or the effective date of our IPO. No compensation expense will be recognized until the performance condition is achieved, at which time the cumulative compensation expense using the accelerated attribution method from the service start date will be recognized. As of December 31, 2016, performance-based stock option awards with a total grant-date fair value of \$14.9 million were outstanding with no compensation expense recognized.

For the years ended December 31, 2014, 2015 and 2016, no stock-based compensation expense was recognized for our stock option awards because a qualifying event had not occurred.

#### **7. Convertible Preferred Stock and Stockholders' Deficit**

We are authorized to issue two classes of capital stock, common stock and preferred stock. We are authorized to issue 79,709,838 total shares, consisting of 61,462,320 shares of common stock and 18,247,518 shares of Series A and Series B convertible preferred stock.

##### ***Common Stock Repurchase***

In February 2014, we purchased, and subsequently retired, 5,725,282 shares of common stock held by common stockholders at a price of \$6.1274 per share. The fair value of our common stock in February 2014 was determined to be \$3.67 per share. The amount representing the fair value of the repurchased shares, \$21.0 million, is included in the accompanying consolidated statement of changes in stockholders' deficit. The difference between the amount paid and the fair value of the common stock, \$14.1 million, was recognized as compensation expense.

Additionally, the board of directors authorized an exercisable event that allowed for the exercise of certain stock options via a cashless exercise. We repurchased, and subsequently retired, 460,266 shares of common stock underlying these stock options from the option holders, resulting in compensation expense of \$2.4 million.

The compensation expense related to this transaction is included in the accompanying statement of operations for the year ended December 31, 2014 as follows (in thousands):

<b>Cost of revenue:</b>	
Subscriptions, software and support	\$ 119
Professional services	737
<b>Operating expenses:</b>	
Sales and marketing	1,802
Research and development	515
General and administrative	13,315
	<u>\$16,488</u>

##### ***Stock Split***

In May 2015, our common stock and convertible preferred stock was split on a two-for-one basis. The number of shares and per-share prices have been retrospectively adjusted to reflect the stock split.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

**Common Stock**

At December 31, 2016, we had reserved shares of common stock for future issuance as follows:

For conversion of Series A and Series B convertible preferred stock	18,163,158
Outstanding stock options	6,784,448
Outstanding preferred stock warrant	84,360
Possible future issuance under equity incentive plan	1,629,322
Total shares of common stock reserved for future issuance	<u>26,661,288</u>

**Liquidation Rights**

In the event of any liquidation or dissolution of the Company, the holders of common stock are entitled to the remaining assets of the Company legally available for distribution after the payment of the full liquidation preference for all series of outstanding convertible preferred stock.

**Dividend and Voting Rights**

The holders of common stock are entitled to receive dividends if and when declared by the Company, but not until holders of convertible preferred stock have been paid a dividend on each outstanding share equal to at least 8% of the original issue price. Holders of common stock have the right to one vote per share.

**Convertible Preferred Stock**

The following table summarizes the issuances of convertible preferred stock:

<u>Name</u>	<u>Original Issue Price per Share</u>	<u>Number of Shares</u>	<u>Conversion Price per Share</u>
Series A convertible preferred stock	\$ 0.88903	12,043,108	\$ 0.88903
Series B convertible preferred stock	\$ 6.1274	6,120,050	\$ 6.1274

Any costs incurred in connection with the issuance of the Series A convertible preferred stock and Series B convertible preferred stock (the "Preferred Stock") have been recorded as a reduction of the carrying amount of the Preferred Stock. Since the Preferred Stock has deemed liquidation provisions which require the shares to be redeemed upon a change in control or other deemed liquidation event, these shares are classified outside of permanent equity and carried at redemption value, which includes cumulative dividends in the case of the Series A convertible preferred stock.

**Dividend Rights**

The holders of our Preferred Stock shall be entitled to receive dividends in preference to any dividend on our common stock at the rate of 8% of the original purchase price per annum for each such series. Such dividends with respect to the Series A convertible preferred stock shall be cumulative and shall accrue from day to day until paid, whether or not the dividends are authorized or declared, whether or not funds are legally available for payment and whether or not the corporation has earnings. Such dividends with respect to the Series B convertible preferred stock shall be non-cumulative and shall not accrue unless declared; provided, however, that in each such case, dividends with respect to the Series A convertible preferred stock and Series B convertible preferred stock shall be payable, on a pari passu basis, only when, as and if declared by the board of directors. In the event

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

dividends are paid on any share of common stock, whether in cash or property, we shall pay an additional dividend on all outstanding shares of Preferred Stock in a per share amount (on an as-if converted to common stock basis) equal to the amount paid or set aside for each share of common stock. We had cumulative dividends of \$6.4 million and \$7.2 million, or \$0.53 and \$0.60 per share, on the Series A convertible preferred stock as of December 31, 2015 and 2016, respectively.

*Liquidation Rights*

Upon any liquidation (as defined in our certificate of incorporation), before any payment to holders of common stock, the holders of Preferred Stock are entitled to receive an amount per share, on a pari passu basis, equal to the greater of (1) the original purchase price per share for each such series (as adjusted for stock splits, stock dividends, recapitalizations, etc.), plus any accrued but unpaid dividends on such shares, or (2) the amount per share of Preferred Stock the holders would be entitled to receive if all shares of Preferred Stock were converted into shares of common stock. We have the option to pay the portion of the liquidation preference attributable to accrued and unpaid dividends in cash or common stock.

*Voting Rights*

Each share of Preferred Stock has voting rights equal to an equivalent number of shares of common stock into which it is convertible and votes together as one class with the common stockholders.

*Conversion Rights*

The holders of the Preferred Stock have the right to convert their shares to common stock at any time. In addition, each share of outstanding Preferred Stock shall automatically be converted into common stock immediately upon the closing of a firm commitment underwritten public offering of common stock by the Company, at a price per share of at least 1.5 times the original issue price of the Series B convertible preferred stock, or \$9.18, pursuant to an effective registration statement under the Securities Act of 1933, as amended, and resulting in at least \$50,000,000 in gross proceeds to the Company, or upon the vote of the requisite holders of Preferred Stock. The number of shares of common stock to which a preferred stockholder shall be entitled to upon conversion shall be the number obtained by dividing the original issue price by the applicable conversion price. No fractional shares will be issued upon conversion of Preferred Stock.

**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

*Summary of Activity*

The following table presents a summary of activity for our Preferred Stock issued and outstanding for the years ended December 31, 2014, 2015 and 2016 (dollar amounts in thousands):

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock	
	Amount	Shares	Amount	Shares
Balance as of January 1, 2014	\$ 15,341	12,043,108	\$ —	—
Issuance of Series B convertible preferred stock, net of offering costs of \$120	—	—	37,380	6,120,050
Accretion of dividends on convertible preferred stock	856	—	—	—
Accretion of issuance costs on convertible preferred stock	—	—	120	—
<b>Balance as of December 31, 2014</b>	<b>16,197</b>	<b>12,043,108</b>	<b>37,500</b>	<b>6,120,050</b>
Accretion of dividends on convertible preferred stock	861	—	—	—
<b>Balance as of December 31, 2015</b>	<b>17,058</b>	<b>12,043,108</b>	<b>37,500</b>	<b>6,120,050</b>
Accretion of dividends on convertible preferred stock	857	—	—	—
<b>Balance as of December 31, 2016</b>	<b>\$ 17,915</b>	<b>12,043,108</b>	<b>\$ 37,500</b>	<b>6,120,050</b>

**8. Warrants**

In November 2008, we issued a warrant to purchase 84,360 shares of our Series A convertible preferred stock in connection with a credit facility with a lender. The warrant has a 10-year term and an exercise price of \$0.88905 per share. This warrant is subject to remeasurement at each reporting period. The fair value of the warrant as of December 31, 2015 and 2016 was \$0.7 million and \$0.9 million, respectively. Subsequent changes in fair value are recorded within other expense, net in the accompanying consolidated statements of operations. The inputs and valuation techniques used to measure the fair value of this warrant are discussed in Note 2.

**9. Net Loss Per Share**

Diluted loss per share is the same as basic loss per share for all periods presented because the effects of potentially dilutive items were anti-dilutive given our net loss. The following securities have been excluded from the calculation of weighted average common shares outstanding because the effect is anti-dilutive for the years ended December 31:

	2014	2015	2016
Convertible preferred stock:			
Series A convertible preferred stock	12,043,108	12,043,108	12,043,108
Series B convertible preferred stock	6,120,050	6,120,050	6,120,050
Warrant to purchase Series A convertible preferred stock	84,360	84,360	84,360
Stock options	3,886,408	4,589,988	6,784,448

**10. Commitments and Contingencies**

*Operating Leases*

We lease office space and equipment in our headquarters location in Reston, Virginia, as well as in the United Kingdom, France, Germany, Canada, and Australia, under non-cancellable operating lease agreements which have various expiration dates through 2026 for our office space and various expiration dates through 2019 for our equipment.



**APPIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

A summary of our future minimum gross and net lease commitments by year as of December 31, 2016 is as follows (in thousands):

	<u>Office Leases</u>	<u>Equipment Leases</u>
2017	\$ 6,868	\$ 277
2018	6,538	131
2019	6,720	6
2020	4,780	—
2021	2,466	—
Thereafter	1,304	—
	<u>28,676</u>	<u>414</u>
Less: minimum payments to be received from subleases	(527)	—
<b>Total</b>	<b><u>\$28,149</u></b>	<b><u>\$ 414</u></b>

We record rent expense using the total minimum rent commitment, amortized on the straight-line method over the term of the lease. The difference between monthly rental payments and recorded rent expense is charged to deferred rent. As of December 31, 2015 and 2016, deferred rent totaled \$1.5 million and \$2.4 million, respectively, and is included within other current liabilities and other long-term liabilities on the accompanying consolidated balance sheets.

In September 2014, we entered into an agreement to sublease a certain rented facility to a subtenant. The sublease agreement commenced on November 1, 2014 and will expire when the original lease agreement expires in October 2017. We received \$0.1 million for the year ended December 31, 2014 and \$0.6 million for each of the years ended December 31, 2015 and 2016 in rental income from the subtenant.

Total rent and lease expense was \$3.8 million, \$4.6 million and \$6.6 million for the years ended December 31, 2014, 2015 and 2016, respectively.

#### *Other Commitments*

We also have entered into a non-cancellable agreement for the use of technology that is integral in the development of our software and pay annual royalty fees of \$0.3 million.

#### *Letters of Credit*

As of December 31, 2015 and 2016, we had outstanding letters of credit totaling \$0.8 million and \$1.3 million, respectively, in connection with securing our leased office space. All letters of credit are secured by our borrowing arrangement as described in Note 4.

#### *Legal*

From time to time, we are subject to legal, regulatory and other proceedings and claims that arise in the ordinary course of business. There are no issues or resolution of any matters that are expected to have a material adverse impact on our consolidated financial statements.

**APIAN CORPORATION**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**

**11. Segment and Geographic Information**

The following table summarizes revenue by geography for the years ended December 31 (in thousands):

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Revenue:			
Domestic	\$66,285	\$ 89,043	\$107,069
International	<u>22,711</u>	<u>22,161</u>	<u>25,854</u>
Total	<u>\$88,996</u>	<u>\$111,204</u>	<u>\$132,923</u>

With respect to geographic information, revenues are attributed to respective geographies based on the contracting address of the customer. Revenues from external customers attributed to the United Kingdom were 10.8% of total revenue for the year ended December 31, 2014. There were no individual foreign countries from which more than 10% of our total revenues were attributable for the years ended December 31, 2015 and 2016. Substantially all of our long-lived assets were held in the United States as of December 31, 2015 and 2016.

**12. Retirement Plans**

We have a defined contribution 401(k) retirement and savings plan (the "401(k) Plan") to provide retirement benefits for all eligible employees. All employees who have completed forty-five days of service and are at least twenty-one years of age are eligible to participate in the 401(k) Plan. The 401(k) Plan allows eligible employees to make salary-deferred contributions up to 75% of their annual compensation, as defined, and subject to certain Internal Revenue Service limitations. Employer contributions vest at 25% per year, over four years. For the years ending December 31, 2014, 2015 and 2016, we incurred \$1.3 million, \$1.9 million and \$2.6 million, respectively, in contribution expense related to the employer matching contributions.

We are obligated to make plan contributions for the employees of certain of our wholly-owned foreign subsidiaries. For the years ending December 31, 2014, 2015 and 2016, we incurred \$0.3 million, \$0.5 million and \$0.7 million, respectively, in contribution expense related to our foreign subsidiaries.

**13. Subsequent Events**

We have evaluated subsequent events through February 17, 2017, which is the date that the consolidated financial statements were available to be issued.

On January 31, 2017, our board of directors approved stock option grants under the Plan to purchase an aggregate of 249,700 shares of common stock at an exercise price of \$11.17 per share.

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED BALANCE SHEETS**  
*(in thousands, except share and per share data)*

	As of December 31, 2016	As of September 30, 2017 (unaudited)
<b>Assets</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 31,143	\$ 72,289
Accounts receivable, net of allowance of \$400	46,814	41,399
Deferred commissions, current	7,146	7,719
Prepaid expenses and other current assets	3,281	6,318
<b>Total current assets</b>	<b>88,384</b>	<b>127,725</b>
Property and equipment, net	3,101	2,737
Deferred commissions, net of current portion	10,860	11,343
Deferred tax assets	12	107
Other assets	381	414
<b>Total assets</b>	<b>\$ 102,738</b>	<b>\$ 142,326</b>
<b>Liabilities, Convertible Preferred Stock and Stockholders' Equity (Deficit)</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 5,057	\$ 2,712
Accrued expenses	2,860	5,977
Accrued compensation and related benefits	9,554	9,742
Deferred revenue, current	52,000	57,181
Current portion of long-term debt	6,111	—
Other current liabilities	437	574
<b>Total current liabilities</b>	<b>76,019</b>	<b>76,186</b>
Long-term debt, net of current portion	13,889	—
Deferred tax liabilities	32	35
Deferred revenue, net of current portion	18,108	14,577
Preferred stock warrant liability	850	—
Other long-term liabilities	1,917	1,624
<b>Total liabilities</b>	<b>110,815</b>	<b>92,422</b>
<b>Convertible preferred stock</b>		
Series A convertible preferred stock—par value \$0.0001; 12,127,468 shares authorized and 12,043,108 shares issued and outstanding as of December 31, 2016; no shares authorized, issued or outstanding as of September 30, 2017	17,915	—
Series B convertible preferred stock—par value \$0.0001; 6,120,050 shares authorized, issued and outstanding as of December 31, 2016; no shares authorized, issued or outstanding as of September 30, 2017	37,500	—
<b>Stockholders' equity (deficit)</b>		
Common stock—par value \$0.0001; 61,462,320 shares authorized and 34,274,718 shares issued and outstanding as of December 31, 2016; no shares authorized, issued or outstanding as of September 30, 2017	3	—
Class A common stock—par value \$0.0001; no shares authorized, issued or outstanding as of December 31, 2016; 500,000,000 shares authorized and 7,203,271 shares issued and outstanding as of September 30, 2017	—	1
Class B common stock—par value \$0.0001; no shares authorized, issued or outstanding as of December 31, 2016; 100,000,000 shares authorized and 53,073,459 shares issued and outstanding as of September 30, 2017	—	5
Additional paid-in capital	—	138,767
Accumulated other comprehensive income	1,330	451
Accumulated deficit	(64,825)	(89,320)
<b>Total stockholders' (deficit) equity</b>	<b>(63,492)</b>	<b>49,904</b>
<b>Total liabilities, convertible preferred stock and stockholders' equity (deficit)</b>	<b>\$ 102,738</b>	<b>\$ 142,326</b>

*The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS**  
*(in thousands, except share and per share data)*  
*(unaudited)*

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2017	2016	2017
Revenue:				
Subscriptions, software and support	\$ 17,668	\$ 22,660	\$ 50,607	\$ 66,116
Professional services	13,077	21,988	48,569	60,059
Total revenue	<u>30,745</u>	<u>44,648</u>	<u>99,176</u>	<u>126,175</u>
Cost of revenue:				
Subscriptions, software and support	1,890	2,341	5,508	6,891
Professional services	9,315	14,272	34,016	39,049
Total cost of revenue	<u>11,205</u>	<u>16,613</u>	<u>39,524</u>	<u>45,940</u>
Gross profit	<u>19,540</u>	<u>28,035</u>	<u>59,652</u>	<u>80,235</u>
Operating expenses:				
Sales and marketing	14,480	19,725	39,477	59,503
Research and development	6,702	8,596	16,925	25,867
General and administrative	4,531	6,237	12,779	19,721
Total operating expenses	<u>25,713</u>	<u>34,558</u>	<u>69,181</u>	<u>105,091</u>
Operating loss	<u>(6,173)</u>	<u>(6,523)</u>	<u>(9,529)</u>	<u>(24,856)</u>
Other (income) expense:				
Other (income) expense, net	(67)	(425)	129	(1,658)
Interest expense (income)	243	(2)	726	451
Total other expense (income)	<u>176</u>	<u>(427)</u>	<u>855</u>	<u>(1,207)</u>
Net loss before income taxes	<u>(6,349)</u>	<u>(6,096)</u>	<u>(10,384)</u>	<u>(23,649)</u>
Income tax (benefit) expense	<u>(1,610)</u>	<u>188</u>	<u>(2,106)</u>	<u>489</u>
Net loss	<u>(4,739)</u>	<u>(6,284)</u>	<u>(8,278)</u>	<u>(24,138)</u>
Accretion of dividends on convertible preferred stock	214	—	642	357
Net loss attributable to common stockholders	<u>\$ (4,953)</u>	<u>\$ (6,284)</u>	<u>\$ (8,920)</u>	<u>\$ (24,495)</u>
Net loss per share attributable to common stockholders:				
Basic and diluted	\$ (0.14)	\$ (0.10)	\$ (0.26)	\$ (0.53)
Weighted average common shares outstanding:				
Basic and diluted	34,274,718	60,204,596	34,274,718	45,855,044

*The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS**  
*(in thousands)*  
*(unaudited)*

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	<u>2016</u>	<u>2017</u>	<u>2016</u>	<u>2017</u>
Net loss	\$ (4,739)	\$ (6,284)	\$ (8,278)	\$ (24,138)
Comprehensive loss, net of income taxes:				
Foreign currency translation adjustment	(177)	517	(537)	(879)
Total other comprehensive loss, net of income taxes	<u>\$ (4,916)</u>	<u>\$ (5,767)</u>	<u>\$ (8,815)</u>	<u>\$ (25,017)</u>

*The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)**  
*(in thousands, except share data)*  
*(unaudited)*

	<u>Common Stock</u>		<u>Additional Paid-In Capital</u>	<u>Accumulated Other Comprehensive Income (Loss)</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Equity (Deficit)</u>
	<u>Shares</u>	<u>Amount</u>				
Balance, January 1, 2017	34,274,718	\$ 3	\$ —	\$ 1,330	\$ (64,825)	\$ (63,492)
Net loss	—	—	—	—	(24,138)	(24,138)
Accretion of dividends on convertible preferred stock	—	—	—	—	(357)	(357)
Conversion of convertible preferred stock to common stock	18,163,158	2	48,205	—	—	48,207
Conversion of convertible preferred stock warrant to common stock warrant	—	—	1,191	—	—	1,191
Issuance of common stock from initial public offering, net of issuance costs	7,187,500	1	77,788	—	—	77,789
Exercise of common stock warrant	79,363	—	—	—	—	—
Issuance of common stock to directors	10,841	—	—	—	—	—
Vesting of restricted stock units	4,930	—	—	—	—	—
Exercise of stock options	556,220	—	664	—	—	664
Stock-based compensation expense	—	—	10,919	—	—	10,919
Other comprehensive loss	—	—	—	(879)	—	(879)
Balance, September 30, 2017	<u>60,276,730</u>	<u>\$ 6</u>	<u>\$138,767</u>	<u>\$ 451</u>	<u>\$ (89,320)</u>	<u>\$ 49,904</u>

*The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**  
*(in thousands)*  
*(unaudited)*

	Nine Months Ended September 30,	
	2016	2017
<b>Cash flows from operating activities:</b>		
Net loss	\$ (8,278)	\$(24,138)
<b>Adjustments to reconcile net loss to net cash used in operating activities:</b>		
Depreciation and amortization	567	673
Bad debt expense	4	—
Deferred income taxes	(883)	(91)
Stock-based compensation	—	10,919
Fair value adjustment for warrant liability	200	341
Loss on extinguishment of debt	—	384
<b>Changes in assets and liabilities:</b>		
Accounts receivable	6,208	4,329
Prepaid expenses and other assets	(2,360)	(3,184)
Deferred commissions	(1,389)	(1,056)
Accounts payable and accrued expenses	(2,931)	1,202
Accrued compensation and related benefits	1,617	(339)
Other current liabilities	(1,377)	(75)
Deferred revenue	374	1,043
Other long-term liabilities	433	(143)
<b>Net cash used in operating activities</b>	<b>(7,815)</b>	<b>(10,135)</b>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	(935)	(295)
<b>Net cash used in investing activities</b>	<b>(935)</b>	<b>(295)</b>
<b>Cash flows from financing activities:</b>		
Proceeds from initial public offering, net of underwriting discounts	—	80,213
Payment of deferred initial public offering costs	—	(2,424)
Payment of dividend to Series A preferred stockholders	—	(7,565)
Proceeds from exercise of common stock options	—	664
Proceeds from issuance of long-term debt, net of debt issuance costs	20,000	19,616
Repayment of long-term debt	(10,000)	(40,000)
<b>Net cash provided by financing activities</b>	<b>10,000</b>	<b>50,504</b>
<b>Effect of foreign exchange rate changes on cash and cash equivalents</b>	<b>(907)</b>	<b>1,072</b>
<b>Net increase in cash and cash equivalents</b>	<b>343</b>	<b>41,146</b>
<b>Cash and cash equivalents, beginning of period</b>	<b>31,393</b>	<b>31,143</b>
<b>Cash and cash equivalents, end of period</b>	<b>\$ 31,736</b>	<b>\$ 72,289</b>
<b>Supplemental disclosure of cash flow information:</b>		
Cash paid for interest	\$ 643	\$ —
Cash paid for income taxes	\$ 580	\$ 484
<b>Supplemental disclosure of non-cash financing activities:</b>		
Conversion of convertible preferred stock to common stock	\$ —	\$ 48,207
Conversion of convertible preferred stock warrant to common stock warrant	\$ —	\$ 1,191
Accretion of dividends on convertible preferred stock	\$ 642	\$ 357

*The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.*

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**  
**(UNAUDITED)**

**1. Organization and Description of Business**

Appian Corporation (together with its subsidiaries, “Appian,” the “Company,” “we” or “our”) provides a leading low-code software development platform that enables organizations to rapidly develop powerful and unique applications. The applications created on our platform help companies drive digital transformation and competitive differentiation. We were incorporated in the state of Delaware in August 1999. We are headquartered in Reston, Virginia and have offices in Canada, Switzerland, the United Kingdom, France, Germany, the Netherlands, Italy, and Australia.

**2. Significant Accounting Policies**

***Basis of Presentation***

The accompanying unaudited condensed consolidated financial statements and footnotes have been prepared in accordance with accounting principles generally accepted in the United States of America (“U.S. GAAP”) as contained in the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (the “Codification” or “ASC”) for interim financial information. In the opinion of management, the interim financial information includes all adjustments of a normal recurring nature necessary for a fair presentation of the results of operations, financial position, changes in stockholders’ equity (deficit) and cash flows. The results of operations for the current period are not necessarily indicative of the results for the full year or the results for any future periods. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and related footnotes included in our final prospectus for our initial public offering (“IPO”) dated as of May 24, 2017 and filed with the Securities and Exchange Commission (the “SEC”) pursuant to Rule 424(b)(4) under the Securities Act of 1933, as amended.

***Use of Estimates***

The preparation of our condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and judgments that affect the amounts reported in these condensed consolidated financial statements and accompanying notes. Although we believe that the estimates we use are reasonable, due to the inherent uncertainty involved in making these estimates, actual results reported in future periods could differ from those estimates.

Significant estimates embedded in the condensed consolidated financial statements include revenue recognition, income taxes and the related valuation allowance, stock-based compensation and fair value measurements for our common stock and preferred stock warrant.

***Principles of Consolidation***

The accompanying condensed consolidated financial statements include the accounts of Appian and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

***Initial Public Offering***

In May 2017, we completed an IPO in which we sold 7,187,500 shares of our newly-authorized Class A common stock at an initial price to the public of \$12.00 per share. We received net proceeds of \$77.8 million, after deducting underwriting discounts and commissions and offering expenses paid and payable by us, from sales of our shares in the IPO. Immediately prior to the completion of the IPO, (1) all shares of common stock then outstanding were converted into Class B common stock on a one-for-one basis, (2) a warrant to purchase



**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

shares of convertible preferred stock was converted into a warrant to purchase shares of Class B common stock and (3) all shares of convertible preferred stock then outstanding were converted into shares of our common stock on a one-for-one basis, and then reclassified as shares of Class B common stock. See Note 7 for further discussion of the convertible preferred stock and Note 8 for further discussion of the warrant.

Deferred offering costs of \$2.4 million, consisting of legal, accounting and other fees and costs related to our IPO, were recorded to additional paid-in capital as a reduction of the proceeds upon the closing of our IPO.

***Revenue Recognition***

We generate revenue primarily through sales of subscriptions to our platform, as well as professional services. We recognize revenue when all of the following conditions are met: (1) there is persuasive evidence of an arrangement; (2) the service or product has been provided to the customer; (3) the amount of fees to be paid by the customer is fixed or determinable; and (4) the collection of related fees is reasonably assured. If collection is not reasonably assured, we defer revenue recognition until collectability becomes reasonably assured. Our arrangements do not contain general rights of return. Revenue is recognized net of any taxes collected from customers and subsequently remitted to governmental authorities.

***Subscriptions, Software and Support Revenue***

Subscriptions, software and support revenue is primarily related to (1) software as a service (“SaaS”) subscriptions bundled with maintenance and support and hosting services and (2) term license subscriptions bundled with maintenance and support. To a lesser extent, we also generate revenue from the sale of perpetual software licenses and associated maintenance and support.

Historically, we licensed our software primarily under perpetual licenses, but over time we transitioned from perpetual licenses to subscriptions. As a result, revenue from our perpetual software licenses was less than 1.0% of our total revenue for the three and nine months ended September 30, 2016 and September 30, 2017.

We generally charge subscription fees on a per-user basis. We bill customers and collect payment for subscriptions to our platform in advance on a monthly, quarterly or annual basis. In certain instances, we have had customers pay their entire contract up front.

**SaaS Subscriptions**

Our SaaS subscription revenue is derived from customers accessing our cloud offering pursuant to contracts that are generally one to five years in length. We perform all required maintenance and support for our cloud offering and we do not separately charge customers for hosting costs. In these arrangements, our customers do not have the right to take the software on-premises and, as a result, such arrangements are not accounted for within the scope of the software revenue guidance. Revenue from SaaS subscriptions is recognized ratably over the term of the subscription, beginning with the date our service is made available to our customer.

**Term License Subscriptions**

Our term license subscription revenue is derived from customers with on-premises installations of our platform pursuant to contracts that are generally one to five years in length. Customers with term license subscriptions have the right to use our software and receive maintenance and support. Since we do not sell maintenance and support separately from the subscription, revenue for the term license subscription and maintenance and support is recognized ratably over the term of the subscription, upon delivery of the platform to the customer when sold on a standalone basis.

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

**Perpetual Licenses**

Our perpetual license revenue is derived from customers with perpetual licenses to our platform and associated maintenance and support contracts. We recognize revenue from perpetual licenses on the date of delivery to our customer. We sell maintenance and support to perpetual license customers separately from the perpetual licenses pursuant to agreements that generally renew annually. Maintenance and support revenue is deferred and recognized ratably over the term of the support period.

*Professional Services*

Our professional services revenue is comprised of fees for consulting services, including application development and deployment assistance and training related to our platform. Our professional services are not essential to the functionality of our platform because the platform is ready for the customer's use immediately upon delivery and is not modified or customized in any manner.

Consulting services are billed under both time-and-material and fixed-fee arrangements. For standalone time-and-material contracts, we recognize revenue at contractually agreed upon billing rates applied to hours performed, plus the cost of any materials delivered. For standalone fixed-fee contracts, we also recognize revenue as the work is performed using the proportional performance method of accounting. Training revenue is recognized when the associated training services are delivered. Training is also sold in the form of a subscription arrangement where a customer agrees to pay an annual fixed fee for a fixed number of users to have access to all of our training offerings during the year. Revenue from training subscription agreements is recognized ratably over the subscription period.

We defer recognition of revenue from work performed on pending contract modifications until the period in which the modifications are accepted and funding is approved by the customer. Costs of work performed on pending contract modifications are expensed as incurred.

*Multiple Element Arrangements*

Our multiple element arrangements are from SaaS subscriptions, term license subscriptions, and perpetual licenses that are generally sold in combination with maintenance and support service and frequently with professional services.

**SaaS Subscriptions**

For multiple element arrangements involving SaaS subscriptions that include professional services in addition to the subscription to our platform, we evaluate each element to determine whether it represents a separate unit of accounting. Because there are third-party vendors who routinely sell and provide the same professional services to our customers, our professional services are deemed to have standalone value apart from the SaaS subscription. Additionally, we offer both SaaS subscriptions and professional services on a standalone basis. Professional services revenue is therefore accounted for separately from subscription fees and recognized as the professional services are performed. We allocate revenue to the elements based on the selling price hierarchy using vendor-specific objective evidence ("VSOE") of selling price, third-party evidence ("TPE") of selling price, or if neither exists, best estimated selling price ("BESP"). In cases where we do not have VSOE or TPE of the elements of our arrangements, we use BESP to allocate revenue. We determine BESP for a service by considering multiple factors including, but not limited to, evaluating the weighted average of actual sales prices and other factors such as gross margin objectives, pricing practices and growth strategy. Pricing practices taken

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

into consideration include historic contractually stated prices, volume discounts where applicable and our price lists. While we believe we can make reliable estimates regarding these matters, these estimates are inherently subjective. Once the revenue is allocated to these elements, revenue is recognized as such services are provided.

**Term License Subscriptions**

For multiple element arrangements involving term license subscriptions, maintenance and support and professional services, we do not have VSOE of fair value for the maintenance and support. Our term license subscriptions are generally not sold on a standalone basis, and therefore, we have not established VSOE of fair value for the subscriptions. Consequently, for our bundled arrangements that include certain professional services, there are two undelivered elements for which VSOE of fair value has not been established and, therefore, we utilize the combined services approach and defer all revenue until the software has been delivered and the provision of all services has commenced. We then recognize the entire fee from the arrangement ratably over the remaining period of the arrangement, assuming all other software revenue recognition criteria have been met.

**Perpetual Licenses**

For multiple element arrangements involving our perpetual software licenses, we allocate revenue to the software license arrangement by determining if VSOE of fair value exists for the undelivered elements, which are usually maintenance and support and professional services. In situations where VSOE of fair value exists for the undelivered elements, we apply the residual method whereby the fees allocated to license revenue are recognized upon delivery, the fees allocated to maintenance and support revenue are recognized over the service period and the fees allocated to professional services and training are recognized as performed. In instances where we lack VSOE of fair value for the undelivered elements, revenue is either deferred until the final element is delivered or recognized ratably over the service period when the only undelivered elements are either professional services or maintenance and support. We have VSOE for maintenance and support elements and professional services elements performed on a time and materials basis. VSOE of fair value is based upon the price charged when the same element is sold separately. In determining VSOE of fair value, we require that a substantial majority of the selling prices fall within a reasonably narrow pricing range. We reassess VSOE annually or more frequently if required.

**Deferred Revenue**

Deferred revenue primarily consists of amounts billed or billable in advance of revenue recognition from our subscriptions, software, and support and professional services described above. Deferred revenue is recognized as the revenue recognition criteria are met.

**Cost of Revenue**

*Cost of Subscriptions, Software and Support Revenue*

Cost of subscriptions, software and support revenue consists primarily of fees paid to our third-party managed hosting providers and other third-party service providers, personnel costs, including payroll and benefits for our technology operations and customer support teams, and allocated facility costs and overhead.

*Cost of Professional Services Revenue*

Cost of professional services revenue includes all direct and indirect costs to deliver our professional services and training, including employee compensation for our global professional services and training personnel, travel costs, third-party contractor costs and allocated facility costs and overhead.

**APPIAN CORPORATION AND SUBSIDIARIES**  
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***Concentration of Credit Risk***

Our financial instruments that are exposed to concentration of credit risk consist primarily of cash and cash equivalents and trade accounts receivable. Cash deposits may be in excess of insured limits. We believe that the financial institutions that hold our cash deposits are financially sound and, accordingly, minimal credit risk exists with respect to these balances.

With regard to our customers, credit evaluation and account monitoring procedures are used to minimize the risk of loss. We believe that no additional credit risk beyond amounts provided for collection loss are inherent in accounts receivable. Revenue generated from government agencies represented 19.4% and 28.5% of our revenue for the three and nine months ended September 30, 2016, respectively, of which the top three federal government agencies generated 13.1% and 19.5% of our revenue for the three and nine months ended September 30, 2016, respectively. Additionally, 23.1% and 18.6% of our revenue during the three and nine months ended September 30, 2016, respectively, was generated from foreign customers. Revenue generated from government agencies represented 14.2% and 15.4% of our revenue for the three and nine months ended September 30, 2017, respectively, of which the top three federal government agencies generated 7.7% and 9.1% of our revenue for the three and nine months ended September 30, 2017, respectively. Additionally, 28.6% and 25.6% of our revenue during the three and nine months ended September 30, 2017, respectively, was generated from foreign customers. Federal government agencies accounted for 17.2% and 9.1% of accounts receivable at December 31, 2016 and September 30, 2017, respectively.

***Accounts Receivable and Allowance for Doubtful Accounts***

Accounts receivable are stated at realizable value, net of an allowance for doubtful accounts. The allowance for doubtful accounts is based on our assessment of the collectability of accounts. We regularly review the composition of the accounts receivable aging, historical bad debts, changes in payment patterns, customer creditworthiness and current economic trends. If the financial condition of our customers were to deteriorate, resulting in their inability to make required payments, additional provisions for doubtful accounts would be required and would increase bad debt expense. To date, our allowance and related bad debt write-offs have been nominal. There was no change in the allowance for doubtful accounts from December 31, 2016 to September 30, 2017.

***Deferred Commissions***

Deferred commissions are the incremental costs that are directly associated with subscription agreements with customers and consist of sales commissions paid to our direct sales force. Commissions are considered direct and incremental and as such are deferred and amortized over the terms of the related customer contracts consistent with the related revenue. Amortization of deferred commissions is included in sales and marketing expense in the accompanying condensed consolidated statements of operations. Commission expense was \$1.8 million and \$5.4 million for the three and nine months ended September 30, 2016, respectively. Commission expense was \$3.2 million and \$8.5 million for the three and nine months ended September 30, 2017, respectively.

***Fair Value of Financial Instruments***

The carrying amounts of our cash and cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value as of December 31, 2016 and September 30, 2017 because of the relatively short duration of these instruments. The carrying value of our long-term debt as of December 31, 2016 approximated fair value given interest rates for similar debt instruments available to the Company.

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We use a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. The hierarchy requires us to use observable inputs when available, and to minimize the use of unobservable inputs when determining fair value. The three tiers are defined as follows:

- **Level 1.** Observable inputs based on unadjusted quoted prices in active markets for identical assets or liabilities;
- **Level 2.** Inputs, other than quoted prices in active markets, that are observable either directly or indirectly; and
- **Level 3.** Unobservable inputs for which there is little or no market data, which require us to develop our own assumptions.

*Assets and Liabilities Measured at Fair Value on a Recurring Basis*

We evaluate our financial assets and liabilities subject to fair value measurements on a recurring basis to determine the appropriate level in which to classify them for each reporting period. This determination requires significant judgments to be made. After the reclassification of the convertible preferred stock warrant in May 2017, we did not have any assets or liabilities subject to fair value measurements as of September 30, 2017. See Note 8 for further discussion of the warrant reclassification. The following table summarizes the conclusions reached as of December 31, 2016 (in thousands):

	<u>December 31,</u> <u>2016</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
<b>Liabilities:</b>				
Series A convertible preferred stock warrant(1)	\$ 850	\$ —	\$ —	\$ 850
	<u>\$ 850</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 850</u>

- (1) In order to determine the fair value of the convertible preferred stock warrant, we used the Black-Scholes option pricing model (“OPM”). Significant inputs for the OPM included an estimate of the fair value of the Series A convertible preferred stock, the remaining contractual life of the warrant, an estimate of the timing of a liquidity event, a risk-free rate of interest and an estimate of our stock volatility using the volatilities of guideline peer companies.

*Assets and Liabilities Measured at Fair Value on a Recurring Basis Using Significant Unobservable Inputs*

There were no changes in our Level 3 instruments measured at fair value on a recurring basis during the three months ended September 30, 2016 and 2017.

The following table presents the changes in our Level 3 instruments measured at fair value on a recurring basis during the nine months ended September 30, 2016 and 2017 (in thousands):

	<u>Nine Months Ended September 30,</u>	
	<u>2016</u>	<u>2017</u>
Balance as of January 1	\$ 650	\$ 850
Change in fair value of warrant liability	200	341
Reclassification of warrant liability to equity	—	(1,191)
Balance as of September 30	<u>\$ 850</u>	<u>\$ —</u>

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***Stock-Based Compensation***

We account for stock-based compensation expense related to stock-based awards based on the estimated fair value of the award on the grant date. We calculate the fair value of stock options using the Black-Scholes OPM. For service-based awards, stock-based compensation expense is recognized on a straight-line basis over the requisite service period. For performance-based awards, stock-based compensation expense is recognized using the accelerated attribution method, based on the probability of satisfying the performance condition. For awards that contain market conditions, compensation expense is measured using a Monte Carlo simulation model and recognized using the accelerated attribution method over the derived service period based on the expected market performance as of the grant date. For restricted stock units, stock-based compensation expense is recognized on a straight-line basis over the requisite service period.

As discussed in “—Recent Accounting Pronouncements,” we have elected to early adopt Accounting Standards Update (“ASU”) No. 2016-9, which, among other things, permits an entity to make an entity-wide policy election to either (1) estimate the number of awards that are expected to vest or (2) account for forfeitures when they occur. We have elected to account for forfeitures as they occur, rather than estimate expected forfeitures.

***Emerging Growth Company Status***

We are an “emerging growth company” as defined in the Jumpstart Our Business Startups Act (“JOBS Act”). The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this extended transition period and, as a result, we will not adopt new or revised accounting standards on the relevant dates on which adoption of such standards is required for other public companies.

***Recent Accounting Pronouncements***

***Adopted***

In August 2014, the FASB issued ASU No. 2014-15, *Disclosure of Uncertainties about an Entity’s Ability to Continue as a Going Concern* (“ASU 2014-15”), which amends ASC Subtopic 205-40 to provide guidance about management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related disclosures. Specifically, the amendments (1) provide a definition of the term “substantial doubt,” (2) require an evaluation of every reporting period, (3) provide principles for considering the mitigating effect of management’s plans, (4) require certain disclosures when substantial doubt is alleviated as a result of consideration of management’s plans, (5) require an express statement and other disclosures when substantial doubt is not alleviated and (6) require an assessment for a period of one year after the date that financial statements are issued. ASU 2014-15 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-3, *Simplifying the Presentation of Debt Issuance Costs* (“ASU 2015-3”), which simplifies the presentation of debt issuance costs by requiring that such costs be presented in the condensed consolidated balance sheets as a direct deduction from the carrying value of the associated debt instrument, consistent with debt discounts. Subsequent to the issuance of ASU 2015-3, the SEC staff announced that the presentation of debt issuance costs associated with line-of-credit arrangements may be

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presented as an asset. This announcement was codified by the FASB in ASU No. 2015-15, *Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements* (“ASU 2015-15”). ASU 2015-3 and ASU 2015-15 were both effective for our year ended December 31, 2016, and their adoption did not have a material impact on our financial condition, results of operations or cash flows.

In April 2015, the FASB issued ASU No. 2015-5, *Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement* (“ASU 2015-5”), which provides clarification on whether a cloud computing arrangement includes a software license. If a software license is included, the customer should account for the license consistent with its accounting for other software licenses. If a software license is not included, the arrangement should be accounted for as a service contract. ASU 2015-5 was effective for our year ended December 31, 2016, and its adoption did not have a material impact on our financial condition, results of operations or cash flows.

In November 2015, the FASB issued ASU No. 2015-17, *Balance Sheet Classification of Deferred Taxes (Topic 740)* (“ASU 2015-17”), which requires that all deferred tax assets and liabilities, including any related valuation allowance, be classified as noncurrent on the balance sheet. We elected to early adopt ASU 2015-17 beginning with our year ended December 31, 2015. The adoption of ASU 2015-17 did not have a material impact on our financial condition, results of operations or cash flows.

In March 2016, the FASB issued ASU No. 2016-9, *Improvements to Employee Share-Based Payment Accounting (Topic 718)* (“ASU 2016-9”), which is intended to simplify several aspects of the accounting for share-based payment transactions, including the accounting for income taxes, forfeitures, and statutory tax withholding requirements, as well as classification in the statement of cash flows. We elected to early adopt ASU 2016-9 beginning with our year ended December 31, 2016, and have applied the guidance retrospectively. The adoption of ASU 2016-9 did not have a material impact on our financial condition, results of operations or cash flows.

*Not Yet Adopted*

In May 2014, the FASB issued ASU No. 2014-9, *Revenue from Contracts with Customers (Topic 606)* (“ASU 2014-9”), which provides new guidance for revenue recognition. ASU 2014-9 provides that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. ASU 2014-9 also requires improved disclosures to help users of financial statements better understand the nature, amount, timing, and uncertainty of revenue that is recognized. Entities have the option of using either a full retrospective or modified retrospective approach for the adoption of the standard. In March 2016, the FASB issued ASU No. 2016-8, *Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)* (“ASU 2016-8”), which clarifies implementation guidance on principal versus agent considerations in ASU 2014-9. In April 2016, the FASB issued ASU No. 2016-10, *Identifying Performance Obligations and Licensing* (“ASU 2016-10”), which clarifies the identification of performance obligations and the licensing implementation guidance in ASU 2014-9. In addition, in May 2016, the FASB issued ASU No. 2016-12, *Narrow-Scope Improvements and Practical Expedients* (“ASU 2016-12”), which clarifies the guidance on assessing collectibility, presentation of sales taxes, noncash consideration and completed contracts and contract modifications at transition. For public entities, the new standard is effective for annual periods and interim periods within those annual periods, beginning after December 15, 2017. For all other entities, the new standard is effective for annual periods beginning after December 15, 2018, and interim periods within those annual periods beginning after December 15, 2019. We intend to avail ourselves of the JOBS Act extended transition period that permits us to defer adoption until January 1, 2019. We are currently evaluating the impact the adoption of these standards will have on our consolidated financial statements.

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We currently plan to adopt the new standard using the full retrospective approach; however, the decision regarding the adoption method has not been finalized. Our final determination will depend on a number of factors such as the significance of the impact of the new standard on our financial results, system readiness, including that of software procured from third-party providers, and our ability to accumulate and analyze the information necessary to assess the impact on prior period financial statements, as necessary.

We are in the initial stages of our evaluation of the impact of the new standard on our accounting policies, processes, and system requirements. We have assigned internal resources in addition to the engagement of third-party service providers to assist in the evaluation. Furthermore, we have made and will continue to make investments in systems to enable timely and accurate reporting under the new standard. While we continue to assess all potential impacts under the new standard there is the potential for significant impacts to the timing of recognition of revenue, particularly term license subscriptions and professional services revenue. We also expect an impact to our accounting for contract acquisition costs, both with respect to the amounts that will be capitalized as well as the period of amortization.

Under current industry-specific software revenue recognition guidance, we have historically concluded that we did not have VSOE of fair value of the undelivered services related to term license subscriptions, and accordingly, have recognized term license subscriptions and related services ratably over the subscription term. Professional services included in an arrangement with subscription revenue has also been recognized ratably over the subscription term. The new standard, which does not retain the concept of VSOE, requires an evaluation of whether term license subscriptions and related services, including professional services, are distinct performance obligations and therefore should be separately recognized at a point in time or over time. Depending on the outcome of our evaluation, the timing of when revenue is recognized could change significantly for term license subscriptions and professional services under the new standard.

In February 2016, the FASB issued ASU No. 2016-2, *Leases (Topic 842)* (“ASU 2016-2”), which requires that lessees recognize assets and liabilities for leases with lease terms greater than 12 months in the statement of financial position. ASU 2016-2 also requires improved disclosures to help users of financial statements better understand the amount, timing and uncertainty of cash flows arising from leases. The update is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. We are currently evaluating the impact the adoption of ASU 2016-2 will have on our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* (“ASU 2016-15”), which aims to reduce the existing diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. ASU 2016-15 will require adoption on a retrospective basis unless it is impracticable to apply, in which case we would be required to apply the amendments prospectively as of the earliest date practicable. ASU 2016-15 is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted. We are currently in the process of evaluating the impact of adoption of this standard on our consolidated financial statements.



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**3. Accrued Expenses**

Accrued expenses consist of the following:

	<u>December 31, 2016</u>	<u>September 30, 2017</u>
Accrued contract labor costs	\$ 743	\$ 3,122
Accrued audit and tax expenses	358	364
Accrued reimbursable employee expenses	134	285
Accrued marketing and tradeshow expenses	111	251
Other accrued expenses	1,514	1,955
Total	<u>\$ 2,860</u>	<u>\$ 5,977</u>

**4. Debt***2015 Line of Credit*

At December 31, 2015, we had a \$10.0 million revolving line of credit with a lender, expiring in June 2016, which was subsequently amended in June 2016 to extend the maturity date through June 2017. This line of credit was terminated in April 2017.

*2015 Term Loan*

In March 2015, we entered into a collateralized \$10.0 million term loan facility with a lender, maturing in March 2019, and borrowed the full amount under the term loan facility in June 2015. In January 2016, we paid off the outstanding balance of the term loan and simultaneously entered into a collateralized \$20.0 million term loan facility, maturing in January 2020. We borrowed the full amount under the term loan facility in January 2016, which we repaid in full in April 2017.

*2017 Financing Facility*

In April 2017, we entered into a new financing facility consisting of a \$5.0 million senior revolving credit facility, a \$20.0 million senior term loan, and a \$10.0 million subordinated term loan. In connection with the execution of this financing facility, the prior line of credit was terminated, and we borrowed the full \$20.0 million available under the senior term loan and repaid the outstanding balance under our prior term loan. Additionally, in connection with the execution of our new financing facility, the lender waived the prepayment fee associated with our prior line of credit. In June 2017, we used proceeds from our IPO to pay all remaining outstanding principal and interest under the senior term loan and subsequently terminated the senior term loan and subordinated term loan. In connection with the repayment of the senior term loan, we recognized a loss on extinguishment of debt of \$0.4 million related to unamortized debt issuance costs, which is included within other (income) expense, net in the accompanying condensed consolidated statements of operations. As of September 30, 2017, we had no outstanding borrowings. This financing facility was terminated in November 2017 in connection with our entry into a new \$20.0 million revolving line of credit. See Note 11 for additional information regarding our new revolving line of credit.

**5. Income Taxes**

The provision for income taxes is based upon the estimated annual effective tax rates for the year applied to the current period income (loss) before tax plus the tax effect of any significant unusual items, discrete events or changes in tax law. Our operating subsidiaries are exposed to statutory effective tax rates ranging from zero to approximately 40%. Fluctuations in the distribution of pre-tax income (loss) among our operating subsidiaries

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can lead to fluctuations of the effective tax rate in the consolidated financial statements. For the three and nine months ended September 30, 2016, the actual effective tax rates were 25.4% and 20.3%, respectively. For the three and nine months ended September 30, 2017, the actual effective tax rates were (3.1)% and (2.1)%, respectively.

We assess uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainties in Tax*. As of September 30, 2017, our net unrecognized tax benefits totaled \$0.5 million of which the entire portion would impact our effective tax rate if recognized. We anticipate that the amount of reasonably possible unrecognized tax benefits that could decrease over the next 12 months due to the expiration of certain statutes of limitations and settlement of tax audits is not material to our consolidated financial statements.

We file income tax returns in the United States federal jurisdiction and in many state and foreign jurisdictions. The tax years 2013 through 2016 remain open to examination by the major taxing jurisdictions to which we are subject. No material examinations are currently open.

## **6. Stock-Based Compensation**

In May 2017, our board of directors adopted, and our stockholders approved, the 2017 Equity Incentive Plan (the “2017 Plan”), which became effective as of the date of the final prospectus for our IPO. The 2017 Plan provides for the grant of incentive stock options to employees, and for the grant of nonstatutory stock options, restricted stock awards, restricted stock unit awards, stock appreciation rights, performance-based stock awards and other forms of equity compensation to employees, including officers, and to non-employee directors and consultants. We initially reserved 6,421,442 shares of Class A common stock for issuance under the 2017 Plan, which included 421,442 shares that remained available for issuance under our 2007 Stock Option Plan (the “2007 Plan”) at the time that the 2017 Plan became effective. The number of shares reserved under the 2017 Plan increases for any shares subject to outstanding awards originally granted under the 2007 Plan that expire or are forfeited prior to exercise. As a result of the adoption of the 2017 Plan, no further grants may be made under the 2007 Plan. As of September 30, 2017, there were 6,481,622 shares of Class A common stock reserved for issuance under the 2017 Plan, of which 6,425,767 were available to be issued.

The 2007 Plan provided for the grant of stock options to employees, directors, and officers. Options under the 2007 Plan are exercisable into shares of Class B common stock and generally expire ten years from the date of grant. Under the 2007 Plan, the exercise price of each award was established by the board of directors, but could not be less than the fair market value of a share of our common stock on the grant date. Options generally vest upon the satisfaction of both a service condition and a performance condition. The service condition is satisfied at various rates as determined by us, typically on an annual basis over five years. The performance condition required the occurrence of a qualifying event, defined as a change of control transaction or upon the completion of an IPO. The performance condition was satisfied upon the effectiveness of our IPO in May 2017, on which date we recognized \$6.2 million of cumulative stock-based compensation expense using the accelerated attribution method from the service start date.

We estimate the fair value of stock options using the Black-Scholes OPM, which requires the use of subjective assumptions, including the expected term of the option, the current price of the underlying stock, the expected stock price volatility, expected dividend yield and the risk-free interest rate for the expected term of the option. The expected term represents the period of time the stock options are expected to be outstanding. Due to the lack of sufficient historical exercise data to provide a reasonable basis upon which to otherwise estimate the expected term of the stock options, we use the simplified method to estimate the expected term for our stock options. Under the simplified method, the expected term of an option is presumed to be the mid-point between

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the vesting date and the end of the contractual term. Expected volatility is based on historical volatilities for publicly traded stock of comparable companies over the estimated expected term of the stock options. We assume no dividend yield because dividends are not expected to be paid in the near future, which is consistent with our history of not paying dividends.

The following table summarizes the assumptions used to estimate the fair value of stock options granted during the three and nine months ended September 30, 2016 and 2017:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2016	2017	2016	2017
Risk-free interest rate	1.3%	1.9% - 2.1%	1.3% - 1.5%	1.9% - 2.2%
Expected term (in years)	6.5	6.5	6.5	6.5
Expected volatility	41.6%	38.6%	41.2% - 42.0%	38.6% - 40.6%
Expected dividend yield	— %	— %	— %	— %

**Stock Options**

The following table summarizes the stock option activity for the nine months ended September 30, 2017:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2017	6,784,448	\$ 4.65	6.5	\$ 44,259
Granted	1,252,200	11.89		
Exercised	(556,220)	1.19		8,386
Canceled	(96,500)	6.30		
Outstanding at September 30, 2017	<u>7,383,928</u>	6.16	6.7	164,688
Exercisable at September 30, 2017	<u>2,992,648</u>	1.85	3.8	79,636

The weighted average grant-date fair value of options granted during the nine months ended September 30, 2016 and 2017 was \$4.38 and \$5.04 per share, respectively. No stock options vested during the nine months ended September 30, 2016 because a qualifying event had not yet occurred. The total fair value of stock options that vested during the nine months ended September 30, 2017 was \$5.3 million. As of September 30, 2017, the total compensation cost related to unvested stock options not yet recognized was \$12.6 million, which will be recognized over a weighted average period of 3.0 years.

On April 25, 2017, our board of directors modified certain outstanding stock options nearing their expiration date to remove the performance condition. Stock options to purchase an aggregate of 216,160 shares of common stock were modified, and we recognized stock-based compensation expense of \$2.4 million related to this modification.

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**Restricted Stock Units**

The following table summarizes the restricted stock unit activity for the nine months ended September 30, 2017:

	<u>Number of Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Non-vested outstanding at December 31, 2016	—	\$ —
Granted	47,855	20.38
Vested	(4,930)	20.24
Canceled	—	—
Non-vested outstanding at September 30, 2017	<u>42,925</u>	20.40

As of September 30, 2017, total unrecognized compensation cost related to unvested restricted stock units was approximately \$0.8 million and the weighted average remaining vesting period was 2.7 years.

The following table summarizes the components of our stock-based compensation expense for the three and nine months ended September 30, 2017 (in thousands):

	<u>Three Months Ended September 30, 2017</u>	<u>Nine Months Ended September 30, 2017</u>
Stock-based compensation expense related to stock option modifications	\$ —	\$ 2,394
Cumulative stock-based compensation expense related to stock options recorded upon effectiveness of our IPO	—	6,236
Post-IPO stock-based compensation expense related to stock options	1,440	2,025
Stock-based compensation expense related to the issuance of common stock to directors	—	130
Stock-based compensation expense related to restricted stock units	134	134
Total stock-based compensation expense	<u>\$ 1,574</u>	<u>\$ 10,919</u>

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Stock-based compensation expense for restricted stock units, stock options and issuances of common stock is included in the following line items in the accompanying condensed consolidated statements of operations for the three and nine months ended September 30, 2017 (in thousands):

	<u>Three Months Ended September 30, 2017</u>	<u>Nine Months Ended September 30, 2017</u>
Cost of revenue		
Subscriptions, software and support	\$ 80	\$ 484
Professional services	142	1,126
Operating expenses		
Sales and marketing	359	2,782
Research and development	256	2,458
General and administrative	737	4,069
Total stock-based compensation expense	<u>\$ 1,574</u>	<u>\$ 10,919</u>

For the three and nine months ended September 30, 2016, no stock-based compensation expense was recognized for our stock option awards because a qualifying event had not yet occurred.

## 7. Convertible Preferred Stock and Stockholders' Equity (Deficit)

### *Convertible Preferred Stock*

Immediately prior to the completion of the IPO, all shares of convertible preferred stock then outstanding were automatically converted into 18,163,158 shares of common stock on a one-for-one basis, and then reclassified as shares of Class B common stock.

### *Summary of Activity*

The following tables present a summary of activity for our convertible preferred stock issued and outstanding for the nine months ended September 30, 2017 (dollar amounts in thousands):

	<u>Series A Convertible Preferred Stock</u>		<u>Series B Convertible Preferred Stock</u>	
	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>
Balance as of January 1, 2017	\$ 17,915	12,043,108	\$ 37,500	6,120,050
Accretion of dividends on convertible preferred stock	357	—	—	—
Payment of accrued dividend to Series A convertible preferred stockholders	(7,565)	—	—	—
Conversion of convertible preferred stock to common stock	(10,707)	(12,043,108)	(37,500)	(6,120,050)
Balance as of September 30, 2017	<u>\$ —</u>	<u>—</u>	<u>\$ —</u>	<u>—</u>

### *Common Stock*

Immediately prior to the completion of the IPO, all shares of common stock then outstanding were converted into Class B common stock on a one-for-one basis. We offered and sold newly authorized shares of Class A common stock in the IPO.

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion rights. The holders of Class A common stock are entitled to one vote per share, and the holders of Class B common stock are entitled to ten votes per share, on all matters that are subject to stockholder vote. The holders of Class B common stock also have approval rights for certain corporate actions. Each share of Class B common stock may be converted into one share of Class A common stock at the option of its holder and will be automatically converted into one share of Class A common stock upon transfer thereof, subject to certain exceptions. In addition, upon the date on which the outstanding shares of Class B common stock represent less than 10% of the aggregate voting power of our capital stock, all outstanding shares of Class B common stock shall convert automatically into Class A common stock.

**8. Warrants**

We previously issued a warrant to purchase 84,360 shares of Series A convertible preferred stock in conjunction with a credit facility with a lender at an exercise price of \$0.88905 per share. Immediately prior to the completion of the IPO, this warrant was converted into a warrant to purchase 84,360 shares of Class B common stock. The fair value at the time of the conversion was \$1.2 million and was recorded as additional paid-in capital and a reduction of the preferred stock warrant liability. In May 2017, the warrant holder exercised the warrant and we issued 79,363 shares of Class B common stock through a cashless exercise of the warrant, in accordance with its terms.

**9. Basic and Diluted Loss per Common Share**

We use the two-class method to compute net loss per common share because we have issued securities, other than common stock, that contractually entitle the holders to participate in dividends and earnings. These participating securities include our convertible preferred stock which have non-forfeitable rights to participate in any dividends declared on our common stock. The two-class method requires earnings for the period to be allocated between common stock and participating securities based upon their respective rights to receive distributed and undistributed earnings.

Under the two-class method, for periods with net income, basic net income per common share is computed by dividing the net income attributable to common stockholders by the weighted average number of shares of common stock outstanding during the period. Net income attributable to common stockholders is computed by subtracting from net income the portion of current period earnings that the participating securities would have been entitled to receive pursuant to their dividend rights had all of the period's earnings been distributed. No such adjustment to earnings is made during periods with a net loss, as the holders of the participating securities have no obligation to fund losses.

Diluted net income (loss) per common share is computed under the two-class method by using the weighted average number of shares of common stock outstanding, plus, for periods with net income attributable to common stockholders, the potential dilutive effects of stock options and warrants. In addition, we analyze the potential dilutive effect of the outstanding participating securities under the "if-converted" method when calculating diluted earnings per share, in which it is assumed that the outstanding participating securities convert into common stock at the beginning of the period or date of issuance, if later. We report the more dilutive of the approaches (two-class or "if-converted") as our diluted net income per share during the period.

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

The following securities have been excluded from the calculation of weighted average common shares outstanding because the effect is anti-dilutive or performance or market conditions had not been met at the end of the period:

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	2016	2017	2016	2017
Convertible preferred stock:				
Series A convertible preferred stock	12,043,108	—	12,043,108	—
Series B convertible preferred stock	6,120,050	—	6,120,050	—
Warrant to purchase Series A convertible preferred stock	84,360	—	84,360	—
Stock options	6,699,048	7,383,928	6,699,048	7,383,928
Restricted stock units	—	42,925	—	42,925

#### 10. Segment and Geographic Information

The following table summarizes revenue by geography for the three and nine months ended September 30, 2016 and 2017 (in thousands):

	<u>Three Months Ended September 30,</u>		<u>Nine Months Ended September 30,</u>	
	2016	2017	2016	2017
Domestic	\$ 23,650	\$ 31,878	\$ 80,715	\$ 93,860
International	7,095	12,770	18,461	32,315
Total	\$ 30,745	\$ 44,648	\$ 99,176	\$ 126,175

With respect to geographic information, revenue is attributed to respective geographies based on the contracting address of the customer. There were no individual foreign countries from which more than 10% of our total revenue was attributable for the three and nine months ended September 30, 2016 and 2017. Substantially all of our long-lived assets were held in the United States as of December 31, 2016 and September 30, 2017.

#### 11. Subsequent Events

In preparing our condensed consolidated financial statements, we evaluated subsequent events through November 13, 2017, which is the date that the condensed consolidated financial statements were available to be issued.

In November 2017, we entered into a \$20.0 million revolving line of credit with a lender. The facility matures in November 2022. We may elect whether amounts drawn on the revolving line of credit bear interest at a floating rate per annum equal to either the LIBOR or the prime rate plus an additional interest rate margin that is determined by the availability of borrowings under the revolving line of credit. The additional interest rate margin will range from 2.00% to 2.50% in the case of LIBOR advances and from 1.00% to 1.50% in the case of prime rate advances. The revolving line of credit contains an unused facility fee in an amount between 0.15% and 0.25% of the average unused portion of the revolving line of credit, which is payable quarterly. The agreement contains certain customary affirmative and negative covenants and requires us to maintain (i) an adjusted quick ratio of at least 1.35 to 1.0 and (ii) minimum adjusted EBITDA, in the amounts and for the periods set forth in

**APPIAN CORPORATION AND SUBSIDIARIES**  
**NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)**  
**(UNAUDITED)**

the agreement. Any amounts borrowed under the credit facility are collateralized by substantially all of our assets.

On October 25, 2017, our board of directors approved the grant of 689,200 restricted stock units under the 2017 Plan at a fair value of \$22.27 per share to members of management and other employees. The value of these awards at the grant date was \$15.3 million and will be amortized over the vesting periods. In addition, our board of directors also approved stock option grants under the 2017 Plan to purchase an aggregate of 4,000 shares of common stock at an exercise price of \$22.27 per share. The restricted stock units and options vest over five years through October 25, 2022.



# Appian

*"By allowing us to rapidly deliver innovative multi-platform business apps, Appian allowed us to improve our rental customer experience and differentiate ourselves from our competition."*

*CIO, Ryder*

*"With Appian, applications are prototyped and taken to market in a matter of hours or days."*

*Executive for Customer Service Improvement, Bendigo Bank*

*"Appian has united all of our employees with mobile access to the data and processes they need."*

*CFO, Dallas/Fort Worth International Airport*

*"Appian is an innovation enabler, so we use it throughout Sprint."*

*Director, Sprint*

*"Appian allows us to future proof our applications without us having to think about it."*

*CIO, University of South Florida*

# Appian

The Digital Transformation Platform.™



**PART II**  
**INFORMATION NOT REQUIRED IN PROSPECTUS**

**Item 13. Other Expenses of Issuance and Distribution.**

The following table sets forth all costs and expenses, other than underwriting discounts and commissions, payable by us in connection with the sale of the Class A common stock being registered. All amounts shown are estimates except for the Securities and Exchange Commission, or SEC, registration fee and the Financial Industry Regulatory Authority, or FINRA, filing fee.

	<u>Amount to be Paid</u>
SEC registration fee	\$ 12,304
FINRA filing fee	15,324
Blue sky fees and expenses	25,000
Printing and engraving expenses	75,000
Legal fees and expenses	300,000
Accounting fees and expenses	125,000
Transfer agent and registrar fees	10,000
Miscellaneous fees and expenses	37,372
Total	<u>\$ 600,000</u>

**Item 14. Indemnification of Directors and Officers.**

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

As permitted by the Delaware General Corporation Law, (A) our amended and restated certificate of incorporation provides that we are authorized to indemnify our directors and officers (and any other persons whom applicable law permits) to the fullest extent permitted by Delaware law and (B) our amended and restated bylaws provide that: (1) we are required to indemnify our directors and executive officers to the fullest extent permitted by the Delaware General Corporation Law; (2) we may, in our discretion, indemnify our other officers, employees and agents as set forth in the Delaware General Corporation Law; (3) we are required, upon

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satisfaction of certain conditions, to advance all expenses incurred by our directors and executive officers in connection with certain legal proceedings; (4) the rights conferred in the bylaws are not exclusive; (5) we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and (6) we may secure insurance on behalf of any director, officer, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law.

Our policy is to enter into agreements with our directors and executive officers that require us to indemnify them against expenses, judgments, fines, settlements and other amounts that any such person becomes legally obligated to pay (including with respect to a derivative action) in connection with any proceeding, whether actual or threatened, to which such person may be made a party by reason of the fact that such person is or was a director or officer of us or any of our affiliates, provided such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, our best interests. These indemnification agreements also set forth certain procedures that will apply in the event of a claim for indemnification thereunder. At present, no litigation or proceeding is pending that involves any of our directors or officers regarding which indemnification is sought, nor are we aware of any threatened litigation that may result in claims for indemnification.

We maintain a directors' and officers' liability insurance policy. The policy insures directors and officers against unindemnified losses arising from certain wrongful acts in their capacities as directors and officers and reimburses us for those losses for which we have lawfully indemnified the directors and officers. The policy contains various exclusions.

In addition, the underwriting agreement filed as Exhibit 1.1 to this registration statement provides for indemnification by the underwriters of us and our officers and directors for certain liabilities arising under the Securities Act of 1933, as amended, or the Securities Act, or otherwise. Our amended and restated investors' rights agreement with certain stockholders also provides for cross-indemnification in connection with the registration of our common stock on behalf of such investors.

See the undertakings set forth in response to Item 17 herein.

### **Item 15. *Recent Sales of Unregistered Securities.***

The following list sets forth information regarding all unregistered securities issued by us since January 1, 2014 through the date of the prospectus that is a part of this registration statement:

#### ***Issuances of Options to Purchase Common Stock***

From January 1, 2014 through May 30, 2017, we granted under our 2007 Plan options to purchase an aggregate of 5,229,380 shares of our common stock to a total of 838 employees, consultants and directors, having exercise prices ranging from \$3.67 to \$12.00 per share. From the period from January 1, 2014 through May 30, 2017, 260,520 shares were issued upon the exercise of these options at exercise prices between \$12.00 and \$17.90, for aggregate gross proceeds of approximately \$3.3 million.

The offers, sales and issuances of the securities described in the preceding paragraph were deemed to be exempt from registration either under Rule 701 promulgated under the Securities Act, or Rule 701, in that the transactions were under compensatory benefit plans and contracts relating to compensation, or under Section 4(a)(2) of the Securities Act in that the transactions were between an issuer and members of its senior executive management and did not involve any public offering within the meaning of Section 4(a)(2). The recipients of such securities were our employees, directors or consultants and received the securities under our equity incentive plans. Appropriate legends were affixed to the securities issued in these transactions.

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### *Issuances of Preferred Stock*

In February 2014, we issued an aggregate of 6,120,050 shares of our Series B preferred stock to three accredited investors at a per share price of \$6.1274, for aggregate consideration of approximately \$37.5 million.

The offers, sales and issuances of the securities described in the preceding paragraph were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) of the Securities Act or Rule 506 of Regulation D promulgated thereunder as a transaction by an issuer not involving a public offering. The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was either an accredited investor within the meaning of Rule 501 of Regulation D under the Securities Act or had adequate access, through employment, business or other relationships, to information about us.

### *Common Stock Issued upon Exercise of Warrants*

On May 26, 2017, a holder net exercised a warrant, resulting in the issuance of 79,363 shares of Class B common stock. The issuance of such shares of Class B common stock was exempt from registration under Section 3(a)(9) of the Securities Act.

## **Item 16. Exhibits and Financial Statement Schedules.**

### *(a) Exhibits*

<b>Exhibit Number</b>	<b>Description of Document</b>
1.1	<a href="#">Form of Underwriting Agreement.</a>
3.1(1)	<a href="#">Amended and Restated Certificate of Incorporation of Appian Corporation.</a>
3.2(2)	<a href="#">Amended and Restated Bylaws of Appian Corporation.</a>
4.1(3)	<a href="#">Form of Class A common stock certificate of Appian Corporation.</a>
4.2(4)	<a href="#">Amended and Restated Investors' Rights Agreement by and among Appian Corporation and certain of its stockholders, dated February 21, 2014.</a>
5.1	<a href="#">Opinion of Cooley LLP.</a>
10.1+(5)	<a href="#">2007 Stock Option Plan and Form of Option Agreement and Exercise Notice thereunder, as amended to date.</a>
10.2+(6)	<a href="#">2017 Equity Incentive Plan and Forms of Stock Option Agreement, Notice of Exercise and Stock Option Grant Notice thereunder.</a>
10.3+(7)	<a href="#">Non-Employee Director Compensation Plan.</a>
10.4+(8)	<a href="#">Form of Indemnification Agreement by and between Appian Corporation and each of its directors and executive officers.</a>
10.5+(9)	<a href="#">Employment Agreement, dated as of September 7, 2012, by and between Appian Corporation and Matthew Calkins.</a>
10.6+(10)	<a href="#">Employment Agreement, dated as of September 8, 2009, by and between Appian Corporation and Edward Hughes.</a>
10.7+(11)	<a href="#">Form of Amended and Restated Employment Agreement, dated as of April 27, 2017 by and between Appian Corporation and each of Mark Lynch and Chris Winters.</a>
10.8+(12)	<a href="#">Sublease Agreement, dated as of December 10, 2013, by and between Appian Corporation and College Entrance Examination Board, as amended to date.</a>

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<u>Exhibit Number</u>	<u>Description of Document</u>
10.9#(13)	<a href="#">Software Enterprise OEM License Agreement, dated as of June 15, 2016, by and between Appian Corporation and Kx Systems, Inc.</a>
10.10#(14)	<a href="#">Third Amended and Restated Loan and Security Agreement, dated as of November 1, 2017, by and between Appian Corporation and Silicon Valley Bank.</a>
21.1	<a href="#">Subsidiaries of Appian Corporation.</a>
23.1	<a href="#">Consent of BDO USA, LLP, independent registered public accounting firm.</a>
23.2	<a href="#">Consent of Cooley LLP (included in Exhibit 5.1).</a>
24.1	<a href="#">Power of Attorney. Reference is made to the signature page hereto.</a>
99.1	<a href="#">Forrester Research Inc. Consent.</a>
99.2	<a href="#">LTM Research Consent.</a>
101	The following materials from the Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, formatted in eXtensible Business Reporting Language (XBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Income, (iii) Consolidated Statements of Comprehensive Income (Loss), (iv) Consolidated Statements of Changes in Shareholders' Equity, (v) Consolidated Statements of Cash Flows and (vi) Notes to Unaudited Consolidated Financial Statements.

+ Indicates management contract or compensatory plan.

# Confidential treatment requested as to certain portions, which portions have been omitted and filed separately with the Securities and Exchange Commission.

- (1) Previously filed as Exhibit 3.2 to Amendment No. 3 to the Company's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 12, 2017, and incorporated herein by reference.
- (2) Previously filed as Exhibit 3.4 to Amendment No. 2 to the Company's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 10, 2017, and incorporated herein by reference.
- (3) Previously filed as Exhibit 4.1 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 12, 2017, and incorporated herein by reference.
- (4) Previously filed as Exhibit 4.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (5) Previously filed as Exhibit 10.1 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (6) Previously filed as Exhibit 10.2 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 10, 2017, and incorporated herein by reference.
- (7) Previously filed as Exhibit 10.3 to Amendment No. 3 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 12, 2017, and incorporated herein by reference.
- (8) Previously filed as Exhibit 10.4 to Amendment No. 2 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 10, 2017, and incorporated herein by reference.
- (9) Previously filed as Exhibit 10.5 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (10) Previously filed as Exhibit 10.6 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (11) Previously filed as Exhibit 10.7 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (12) Previously filed as Exhibit 10.8 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on May 8, 2017, and incorporated herein by reference.
- (13) Previously filed as Exhibit 10.11 to the Registrant's Registration Statement on Form S-1 (File No. 333-217510), filed with the Securities and Exchange Commission on April 27, 2017, and incorporated herein by reference.
- (14) Previously filed as Exhibit 10.1 to the Registrants's Current Report on Form 8-K, filed with the Securities and Exchange Commission on November 2, 2017, and incorporated herein by reference.

### **(b) Financial Statement Schedules**

No financial statement schedules are provided because the information called for is not required or is shown either in the consolidated financial statements or related notes, which are incorporated herein by reference.

**Item 17. Undertakings.**

Insofar as indemnification by the registrant for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Reston, Virginia, on the 13<sup>th</sup> day of November, 2017.

### APIIAN CORPORATION

By: /s/ Matthew Calkins  
**Matthew Calkins**  
Chief Executive Officer and Chairman of the Board

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Matthew Calkins, Mark Lynch and Christopher Winters, and each of them, his or her true and lawful agent, proxy and attorney-in-fact, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to (1) act on, sign and file with the Securities and Exchange Commission any and all amendments (including post-effective amendments) to this registration statement together with all schedules and exhibits thereto and any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, together with all schedules and exhibits thereto, (2) act on, sign and file such certificates, instruments, agreements and other documents as may be necessary or appropriate in connection therewith, (3) act on and file any supplement to any prospectus included in this registration statement or any such amendment or any subsequent registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and (4) take any and all actions which may be necessary or appropriate to be done, as fully for all intents and purposes as he or she might or could do in person, hereby approving, ratifying and confirming all that such agent, proxy and attorney-in-fact or any of his substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Matthew Calkins</u> <b>Matthew Calkins</b>	Chief Executive Officer and Chairman of the Board <i>(Principal Executive Officer)</i>	November 13, 2017
<u>/s/ Mark Lynch</u> <b>Mark Lynch</b>	Chief Financial Officer <i>(Principal Financial Officer and Principal Accounting Officer)</i>	November 13, 2017
<u>/s/ Robert C. Kramer</u> <b>Robert C. Kramer</b>	General Manager and Director	November 13, 2017
<u>/s/ A.G.W. "Jack" Biddle, III</u> <b>A.G.W. "Jack" Biddle, III</b>	Director	November 13, 2017
<u>/s/ Prashanth "PV" Boccassam</u> <b>Prashanth "PV" Boccassam</b>	Director	November 13, 2017
<u>/s/ Michael G. Devine</u> <b>Michael G. Devine</b>	Director	November 13, 2017



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<u>Signature</u>	<u>Title</u>	<u>Date</u>
<hr/> <u>/s/ Barbara "Bobbie" Kilberg</u> Barbara "Bobbie" Kilberg	Director	November 13, 2017
<hr/> <u>/s/ Michael J. Mulligan</u> Michael J. Mulligan	Director	November 13, 2017

[•] Shares

**APPIAN CORPORATION**

**CLASS A COMMON STOCK, PAR VALUE \$0.0001 PER SHARE**

**UNDERWRITING AGREEMENT**

November [•], 2017

Morgan Stanley & Co. LLC  
Goldman Sachs & Co. LLC  
Barclays Capital Inc.

c/o Morgan Stanley & Co. LLC  
1585 Broadway  
New York, New York 10036

c/o Goldman Sachs & Co. LLC  
200 West Street  
New York, New York 10282

c/o Barclays Capital Inc.  
745 Seventh Avenue  
New York, New York 10019

Ladies and Gentlemen:

Certain stockholders (the “**Selling Stockholders**”) of Appian Corporation, a Delaware corporation (the “**Company**”), named in Schedule II hereto severally propose to sell to the several Underwriters named in Schedule I hereto (the “**Underwriters**”), an aggregate of [•] shares of Class A common stock of the Company, par value \$0.0001 per share (the “**Firm Shares**”), each Selling Stockholder selling the amount set forth opposite such Selling Stockholder’s name in Schedule II hereto under the heading “Firm Shares.”

The Selling Stockholders also severally propose to sell to the several Underwriters an aggregate of not more than an additional [•] shares of its Class A common stock, par value \$0.0001 per share (the “**Additional Shares**”) if and to the extent that you, as representatives of the several Underwriters (the “**Representatives**”), shall have determined to exercise, on behalf of the Underwriters, the right to purchase such shares of Class A Common Stock granted to the Underwriters in Section 3 hereof, each Selling Stockholder selling such number of Additional Shares equal to the product obtained by multiplying (i) the total number of Additional Shares for which the Underwriters exercise their option pursuant to Section 3 hereof and (ii) a fraction, the numerator of which is the number of Additional Shares set forth opposite such Selling Stockholder’s name in Schedule II hereto under the heading “Additional Shares” and the denominator of which is the total number of Additional Shares. The Firm Shares and the Additional Shares are hereinafter collectively referred to as the “**Shares**.” The shares of Class A common stock and Class B common stock, each par value \$0.0001 per share, of the Company are hereinafter referred to as the “**Common Stock**.”

The Company has filed with the Securities and Exchange Commission (the “**Commission**”) a registration statement on Form S-1 (File No. 333-[•]), including a prospectus, relating to the Shares. The registration statement as amended at the time it becomes effective, including the information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rule 430A under the Securities Act of 1933, as amended (the “**Securities Act**”), is hereinafter referred to as the “**Registration Statement**”; the prospectus in the form first used to confirm sales of Shares (or in the form first made available to the Underwriters by the Company to meet requests of purchasers pursuant to Rule 173 under the Securities Act) is hereinafter referred to as the “**Prospectus**.” If the Company has filed an abbreviated registration statement to register additional shares of Common Stock pursuant to Rule 462(b) under the Securities Act (the “**Rule 462 Registration Statement**”), then any reference herein to the term “**Registration Statement**” shall be deemed to include such Rule 462 Registration Statement.

For purposes of this Underwriting Agreement (this “**Agreement**”), “**free writing prospectus**” has the meaning set forth in Rule 405 under the Securities Act, “**Time of Sale Prospectus**” means the preliminary prospectus contained in the Registration Statement at the time of its effectiveness, together with the documents and pricing information and free writing prospectuses, if any, set forth in Schedule III hereto, and “**broadly available road show**” means a “bona fide electronic road show” as defined in Rule 433(h)(5) under the Securities Act that has been made available without restriction to any person. As used herein, the terms “Registration Statement,” “preliminary prospectus,” “Time of Sale Prospectus” and “Prospectus” shall include the documents, if any, incorporated by reference therein as of the date hereof.

1. *Representations and Warranties of the Company.* The Company represents and warrants to and agrees with each of the Underwriters that:

(a) The Registration Statement has become effective; no stop order suspending the effectiveness of the Registration Statement is in effect, and no proceedings for such purpose are pending before or to the knowledge of the Company threatened by the Commission.

(b) The Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (i) the Registration Statement and the Prospectus comply and, as amended or supplemented, if applicable, will, as of the date of such amendment or supplement, comply in all material respects with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder, (ii) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 5), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in

the light of the circumstances under which they were made, not misleading, (iii) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (iv) the Prospectus, as of its date and the Closing Date, does not contain and, as amended or supplemented, if applicable, as of the date of such amendment or supplement, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph do not apply to statements or omissions in the Registration Statement, the Time of Sale Prospectus or the Prospectus based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein.

(c) The Company is not an “ineligible issuer” in connection with the offering pursuant to Rules 164, 405 and 433 under the Securities Act. Any free writing prospectus that the Company is required to file pursuant to Rule 433(d) under the Securities Act has been, or will be, filed with the Commission in accordance with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Each free writing prospectus that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act or that was prepared by or on behalf of or used or referred to by the Company is listed on Schedule IV hereto and complies or will comply in all material respects with the requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder. Except for the free writing prospectuses, if any, identified in Schedule III hereto, and electronic road shows, if any, each furnished to you before first use, the Company has not prepared, used or referred to, and will not, without your prior consent, prepare, use or refer to, any free writing prospectus.

(d) The Company has been duly incorporated, is validly existing as a corporation in good standing under the laws of the State of Delaware, has the corporate power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing in each jurisdiction (to the extent the concept of good standing is applicable in such jurisdiction) in which the conduct of its business or its ownership or leasing of property requires such qualification, except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(e) Each significant subsidiary (as such term is defined in Rule 1-02 of Regulation S-X) of the Company has been duly incorporated, organized or formed, as applicable, is validly existing as a corporation or organization in good standing (to the extent the concept of good standing is applicable in such jurisdiction) under the laws of the jurisdiction of its formation, has the corporate or organizational power and authority to own its property and to conduct its business as described in the Time of Sale Prospectus and the Prospectus and is duly qualified to transact business and is in good standing (to the extent the concept of good standing is applicable in such jurisdiction) in

each jurisdiction in which the conduct of its business or its ownership or leasing of property requires such qualification (to the extent such concepts are applicable under relevant law), except to the extent that the failure to be so qualified or be in good standing would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole; all of the issued shares of capital stock of each significant subsidiary (as such term is defined in Rule 1-02 of Regulation S-X) of the Company have been duly and validly authorized and issued, are fully paid and non-assessable (to the extent such concepts are applicable under relevant law) and are owned directly or indirectly by the Company, free and clear of all liens, encumbrances, equities or claims.

(f) This Agreement has been duly authorized, executed and delivered by the Company.

(g) As of the Closing Date, the authorized capital stock of the Company will conform as to legal matters to the description thereof contained in each of the Time of Sale Prospectus and the Prospectus.

(h) The shares of Common Stock (including the Shares to be sold by the Selling Stockholders) have been duly authorized and are validly issued, fully paid and non-assessable.

(i) The Shares to be issued pursuant to the exercise of vested stock options granted to certain Selling Stockholders have been duly authorized and, when issued and delivered and paid for in accordance with the terms applicable to such stock options, will be validly issued, fully paid and non-assessable, and the issuance or transfer of such Shares will not be subject to any preemptive or similar rights.

(j) The execution and delivery by the Company of, and the performance by the Company of its obligations under, this Agreement will not contravene any provision of (i) applicable law, (ii) the certificate of incorporation or by-laws of the Company, (iii) any agreement or other instrument binding upon the Company or any of its subsidiaries that is material to the Company and its subsidiaries, taken as a whole or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over the Company or any subsidiary, except that in the case of clauses (i), (iii) and (iv) above, where such contravention would not, individually or in the aggregate, reasonably be likely to have a material adverse effect on the Company or any of its subsidiaries taken as a whole and no consent, approval, authorization or order of, or qualification with any governmental body or agency is required for the performance by the Company of its obligations under this Agreement, except such as have been obtained or waived or as may be required by the securities or Blue Sky laws of the various states or foreign jurisdictions or the rules and regulations of the Financial Industry Regulatory Authority (“FINRA”) in connection with the offer and sale of the Shares.

(k) There has not occurred any material adverse change, or any development involving a prospective material adverse change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus.

(l) There are no legal or governmental proceedings pending or to the knowledge of the Company threatened to which the Company or any of its subsidiaries is a party or to which any of the properties of the Company or any of its subsidiaries is subject (i) other than proceedings accurately described in all material respects in the Time of Sale Prospectus and the Prospectus and proceedings that would not reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole, or on the power or ability of the Company to perform its obligations under this Agreement or to consummate the transactions contemplated by the Time of Sale Prospectus and the Prospectus or (ii) that are required to be described in the Registration Statement or the Prospectus and are not so described in all material respects; and there are no statutes, regulations, contracts or other documents that are required to be described in the Registration Statement or the Prospectus or to be filed as exhibits to the Registration Statement that are not described in all material respects or filed as required.

(m) Each preliminary prospectus filed as part of the Registration Statement as originally filed or as part of any amendment thereto, or filed pursuant to Rule 424 under the Securities Act, complied when so filed in all material respects with the applicable requirements of the Securities Act and the applicable rules and regulations of the Commission thereunder.

(n) The Company is not, and after giving effect to the offering and sale of the Shares and the application of the proceeds thereof as described in the Time of Sale Prospectus and the Prospectus will not be, required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(o) The Company and its subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where such noncompliance with Environmental Laws, failure to receive required permits, licenses or other approvals or failure to comply with the terms and conditions of such permits, licenses or approvals would not, singly or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(p) There are no costs or liabilities associated with Environmental Laws (including, without limitation, any capital or operating expenditures required for clean-up, closure of properties or compliance with Environmental Laws or any permit, license or approval, any related constraints on operating activities and any potential liabilities to third parties) which would, singly or in the aggregate, have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(q) There are no contracts, agreements or understandings between the Company and any person granting such person the right (other than such rights which have been waived or complied with) to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company or to require the Company to include such securities with the Shares registered pursuant to the Registration Statement.

(r) (i) None of the Company or its subsidiaries or controlled affiliates, nor any director or officer thereof, nor, to the Company's knowledge, any employee, agent or representative of the Company or of any of its subsidiaries or controlled affiliates, has taken or has present intention to take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment, giving or receipt of money, property, gifts or anything else of value, directly or indirectly, to any government official (including any officer or employee of a government or government-owned or controlled entity or of a public international organization, or any person acting in an official capacity for or on behalf of any of the foregoing, or any political party or party official or candidate for political office) ("**Government Official**") in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (ii) the Company and its subsidiaries and controlled affiliates have conducted their businesses in compliance with applicable anti-corruption and anti-bribery laws and have instituted and maintained policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (iii) neither the Company nor its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption or anti-bribery laws.

(s) The operations of the Company and its subsidiaries are and have been conducted at all times in material compliance with all applicable financial recordkeeping and reporting requirements, including those of the Bank Secrecy Act, as amended by Title III of the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT Act), and the applicable anti-money laundering statutes of jurisdictions where the Company and its subsidiaries conduct business, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency having jurisdiction over the Company or any of its subsidiaries (collectively, the "**Anti-Money Laundering Laws**"), and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Company, threatened.

(t) (i) None of the Company, any of its subsidiaries, or any director or officer thereof, or, to the Company's knowledge, any employee, agent, controlled affiliate or representative of the Company or any of its subsidiaries, is an individual or entity ("**Person**") that is, or is owned or controlled by one or more Persons that are:



(A) the subject of any sanctions administered or enforced by the U.S. Department of Treasury's Office of Foreign Assets Control ("OFAC"), the United Nations Security Council ("UNSC"), the European Union ("EU"), Her Majesty's Treasury ("HMT"), or other relevant sanctions authority (collectively, "Sanctions"), or

(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Crimea, Cuba, Iran, North Korea and Syria).

(ii) The Company will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) For the past 5 years, the Company and its subsidiaries have not knowingly engaged in, are not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(u) Subsequent to the respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, (i) the Company and its subsidiaries have not incurred any material liability or obligation, direct or contingent, nor entered into any material transaction; (ii) the Company has not purchased any of its outstanding capital stock, other than from its employees or other service-providers in connection with the termination of their service pursuant to equity compensation plans or agreements or in connection with the exercise of the Company's right of first refusal upon a proposed transfer, in each case consistent with the description of such plan, agreement or right of first refusal set forth in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, nor declared, paid or otherwise made any dividend or distribution of any kind on its capital stock other than ordinary and customary dividends; and (iii) there has not been any material change in the capital stock (other than the exercise of equity awards or grants of equity awards or forfeiture of equity awards outstanding as of such respective dates as of which information is given in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, in each case granted pursuant to the equity compensation plans described in the Time of Sale Prospectus), short-term debt or long-term debt of the Company and its subsidiaries, except in each case as described in each of the Registration Statement, the Time of Sale Prospectus and the Prospectus, respectively.

(v) The Company and its subsidiaries have good and marketable title in fee simple to all real property and good and marketable title to all personal property (other than Intellectual Property, which is addressed exclusively in Section 1(w)) owned by them, in each case, which is material to the business of the Company and its subsidiaries taken as a whole, free and clear of all liens, encumbrances and defects except as described in the Time of Sale Prospectus or such as do not materially diminish the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and its subsidiaries; and any real property and buildings held under lease by the Company and its subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as would not reasonably be expected to materially interfere with the use made and proposed to be made of such property and buildings by the Company and its subsidiaries.

(w) The Company and its subsidiaries own or possess, or can acquire on commercially reasonable terms, sufficient rights to use all material patents, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented or unpatentable proprietary or confidential information, systems or procedures), trademarks, service marks and trade names currently employed by them in connection with the business described in the Time of Sale Prospectus. Neither the Company nor any of its subsidiaries has received any written notice of infringement of or conflict with asserted rights of others with respect to any of the foregoing which, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(x) No material labor dispute with the employees of the Company or any of its subsidiaries exists, or, to the knowledge of the Company, is imminent; and the Company is not aware of any existing, threatened or imminent labor disturbance by the employees of any of its principal suppliers, manufacturers or contractors that would have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(y) The Company and each of its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as the Company believes are prudent and customary in the businesses in which they are engaged; neither the Company nor any of its subsidiaries has been refused any insurance coverage sought or applied for; and neither the Company nor any of its subsidiaries has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(z) The Company and its subsidiaries, taken as a whole, possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, except where the failure to have such certificates, authorizations or permits would not reasonably be

expected to have a material adverse effect on the Company and its subsidiaries taken as a whole, and neither the Company nor any of its subsidiaries has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit which, singly or in the aggregate, would reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole.

(aa) The Company and its subsidiaries on a consolidated basis maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles in the United States ("**U.S. GAAP**") and to maintain asset accountability; (iii) access to assets is permitted only in accordance with management's general or specific authorization; (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences and (v) the interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement is accurate. Except as described in the Time of Sale Prospectus, since the end of the Company's most recent audited fiscal year, there has been (i) no material weakness in the Company's internal control over financial reporting (whether or not remediated) and (ii) no change in the Company's internal control over financial reporting that has materially and adversely affected, or is reasonably likely to materially and adversely affect, the Company's internal control over financial reporting.

(bb) Except as disclosed in "Risk Factors" in the Time of Sale Prospectus, the Company maintains an effective system of "disclosure controls and procedures" (as defined in Rule 13a-15(e) of the Exchange Act) that complies with the requirements of the Exchange Act and that has been designed to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Commission's rules and forms, including controls and procedures designed to ensure that such information is accumulated and communicated to the Company's management as appropriate to allow timely decisions regarding required disclosure. The Company has carried out evaluations of the effectiveness of its disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act through September 30, 2017.

(cc) The Company has not sold, issued or distributed any shares of Common Stock during the six-month period preceding the date hereof, including any sales pursuant to Rule 144A under, or Regulation D or S of, the Securities Act, other than shares issued pursuant to employee benefit plans, qualified stock option plans or other employee compensation plans or pursuant to outstanding options, rights or warrants or in connection with the Company's initial public offering of Class A Common Stock.

(dd) The Company and each of its subsidiaries have filed all federal, state, local and foreign tax returns required to be filed by them through the date of this Agreement or have requested extensions thereof (except where the failure to file would not, individually or in the aggregate, reasonably be expected to have a material adverse effect on the Company and its subsidiaries, taken as a whole) and have paid all taxes required to be

paid thereon (except for cases in which the failure to file or pay would not reasonably be expected to have a material adverse effect, or, except as currently being contested in good faith and for which reserves required by U.S. GAAP have been created in the financial statements of the Company), and no tax deficiency has been determined adversely to the Company or any of its subsidiaries which has had (nor does the Company nor any of its subsidiaries have any notice or knowledge of any tax deficiency which would reasonably be expected to be determined adversely to the Company or its subsidiaries and which would reasonably be expected to have) a material adverse effect on the Company and its subsidiaries, taken as a whole.

(ee) From the time of initial confidential submission of the Registration Statement to the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) through the date hereof, the Company has been and is an “emerging growth company,” as defined in Section 2(a) of the Securities Act (an “**Emerging Growth Company**”). “**Testing-the-Waters Communication**” means any oral or written communication with potential investors undertaken in reliance on Section 5(d) of the Securities Act.

(ff) The Company (i) has not alone engaged in any Testing-the-Waters Communication other than Testing-the-Waters Communications with the consent of Morgan Stanley & Co. LLC (“**Morgan Stanley**”) and Goldman Sachs & Co. LLC (“**Goldman Sachs**”) and (ii) has not authorized anyone other than Morgan Stanley and Goldman Sachs to engage in Testing-the-Waters Communications. The Company reconfirms that Morgan Stanley and Goldman Sachs have been authorized to act on its behalf in undertaking Testing-the-Waters Communications. The Company has not distributed any Written Testing-the-Waters Communications other than those listed on Schedule IV hereto. “**Written Testing-the-Waters Communication**” means any Testing-the-Waters Communication that is a written communication within the meaning of Rule 405 under the Securities Act.

(gg) The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Registration Statement fairly presents the information called for in all material respects and has been prepared in accordance with the Commission’s rules and guidelines applicable thereto.

(hh) As of the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers, none of (A) the Time of Sale Prospectus, (B) any free writing prospectus, when considered together with the Time of Sale Prospectus, and (C) any individual Written Testing-the-Waters Communication, when considered together with the Time of Sale Prospectus, included, includes or will include an untrue statement of a material fact or omitted, omits or will omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(ii) Nothing has come to the attention of the Company that has caused it to reasonably believe that the industry-related and market-related data included in the Time of Sale Prospectus and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

(jj) The consolidated financial statements (including the related notes thereto) of the Company and its consolidated subsidiaries included in the Registration Statement, the Time of Sale Prospectus and the Prospectus comply in all material respects with the applicable requirements of the Securities Act and present fairly in all material respects the financial position of the Company and its consolidated subsidiaries as of the dates indicated and the results of their operations and the changes in their cash flows for the periods specified; such financial statements have been prepared in conformity with U.S. GAAP applied on a consistent basis throughout the periods covered thereby, except as described therein; the other financial information included in the Registration Statement, the Time of Sale Prospectus and the Prospectus has been derived from the accounting records of the Company and its consolidated subsidiaries and presents fairly in all material respects the information shown thereby.

(kk) BDO USA, LLP (“**BDO**”) who have certified certain financial statements of the Company and its subsidiaries, is an independent registered public accounting firm with respect to the Company and its subsidiaries within the applicable rules and regulations adopted by the Commission and the Public Company Accounting Oversight Board (United States) and as required by the Securities Act.

2. *Representations and Warranties of the Selling Stockholders.* Each Selling Stockholder, severally and not jointly, represents and warrants to and agrees with each of the Underwriters that:

(a) This Agreement has been duly authorized, executed and delivered by or on behalf of such Selling Stockholder.

(b) The execution and delivery by such Selling Stockholder of, and the performance by such Selling Stockholder of its obligations under, this Agreement, the Custody Agreement signed by such Selling Stockholder and Computershare Trust Company, N.A., as Custodian, relating to the deposit of the Shares to be sold by such Selling Stockholder (the “**Custody Agreement**”) and the Power of Attorney (or execution by the Selling Stockholder’s general partner entity in its capacity as general partner of the Selling Stockholder) appointing certain individuals as such Selling Stockholder’s attorneys-in-fact to the extent set forth therein, relating to the transactions contemplated hereby and by the Registration Statement (the “**Power of Attorney**”) will not contravene (i) any provision of applicable law, or (ii) the certificate of incorporation or by-laws of such Selling Stockholder (if such Selling Stockholder is a corporation), or (iii) any agreement or other instrument binding upon such Selling Stockholder or (iv) any judgment, order or decree of any governmental body, agency or court having jurisdiction over such Selling Stockholder, except in the case of clauses (i), (iii) and (iv) as would not, individually or in the aggregate, have a material adverse effect on the ability of the Selling Stockholder to consummate the transactions contemplated by this Agreement, the Custody Agreement and the Power of Attorney, and no consent, approval, authorization or order of, or qualification with, any governmental body or agency is required for the

performance by such Selling Stockholder of its obligations under this Agreement or the Custody Agreement or Power of Attorney of such Selling Stockholder, except such as have been obtained and made under the Securities Act, such as may be required by the Exchange Act or the rules and regulations thereunder or may be required by the securities or Blue Sky laws of the various states or foreign jurisdictions in connection with the offer and sale of the Shares.

(c) Such Selling Stockholder has, and on the Closing Date will have, valid title to, or a valid “security entitlement” within the meaning of Section 8-501 of the New York Uniform Commercial Code in respect of, the Shares to be sold by such Selling Stockholder free and clear of all security interests, claims, liens, equities or other encumbrances and the legal right and power, and all authorization and approval required by law, to enter into this Agreement, the Custody Agreement and the Power of Attorney and to sell, transfer and deliver the Shares to be sold by such Selling Stockholder or a security entitlement in respect of such Shares.

(d) The Custody Agreement and the Power of Attorney have been duly authorized, executed and delivered by such Selling Stockholder (or the Selling Stockholder’s general partner entity in its capacity as general partner of the Selling Stockholder) and are valid and binding agreements of such Selling Stockholder.

(e) Upon payment for the Shares to be sold by such Selling Stockholder pursuant to this Agreement, delivery of such Shares, as directed by the Underwriters, to Cede & Co. (“**Cede**”) or such other nominee as may be designated by the Depository Trust Company (“**DTC**”), registration of such Shares in the name of Cede or such other nominee and the crediting of such Shares on the books of DTC to securities accounts of the Underwriters (assuming that neither DTC nor any such Underwriter has notice of any adverse claim (within the meaning of Section 8-105 of the New York Uniform Commercial Code (the “**UCC**”)) to such Shares), (A) DTC shall be a “protected purchaser” of such Shares within the meaning of Section 8-303 of the UCC, (B) under Section 8-501 of the UCC, the Underwriters will acquire a valid security entitlement in respect of such Shares and (C) no action based on any “adverse claim”, within the meaning of Section 8-102 of the UCC, to such Shares may be successfully asserted against the Underwriters with respect to such security entitlement; for purposes of this representation, such Selling Stockholder may assume that when such payment, delivery and crediting occur, (x) such Shares will have been registered in the name of Cede or another nominee designated by DTC, in each case on the Company’s share registry in accordance with its certificate of incorporation, bylaws and applicable law, (y) DTC will be registered as a “clearing corporation” within the meaning of Section 8-102 of the UCC and (z) appropriate entries to the accounts of the several Underwriters on the records of DTC will have been made pursuant to the UCC.

(f) Such Selling Stockholder is not (i) an employee benefit plan subject to Title I of the Employee Retirement Income Security Act of 1974, as amended (“**ERISA**”), (ii) a plan or account subject to Section 4975 of the Internal Revenue Code of 1986, as amended or (iii) an entity deemed to hold “plan assets” of any such plan or account under Section 3(42) of ERISA, 29 C.F.R. 2510.3-101, or otherwise.

(g) Such Selling Stockholder is not prompted by any information concerning the Company or its subsidiaries which is not set forth in the Time of Sale Prospectus and the Prospectus to sell its Shares pursuant to this Agreement.

(h) (i) The Registration Statement, when it became effective, did not contain and, as amended or supplemented, if applicable, will not, as of the date of such amendment or supplement, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) the Time of Sale Prospectus does not, and at the time of each sale of the Shares in connection with the offering when the Prospectus is not yet available to prospective purchasers and at the Closing Date (as defined in Section 5), the Time of Sale Prospectus, as then amended or supplemented by the Company, if applicable, will not, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, (iii) each broadly available road show, if any, when considered together with the Time of Sale Prospectus, does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading and (iv) the Prospectus does not contain and, as amended or supplemented, if applicable, will not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, except that the representations and warranties set forth in this paragraph 2(g) are limited to statements or omissions in the Registration Statement or the Prospectus based upon and in conformity with information relating to any Selling Stockholder furnished to the Company in writing by such Selling Stockholder through you expressly for use in the Registration Statement, Time of Sale Prospectus or the Prospectus, it being understood and agreed that the only information furnished by such Selling Stockholder consists of the name of such Selling Stockholder, the number of offered Shares and the address and other information with respect to such Selling Stockholder (excluding percentages) which appear in the Registration Statement, Time of Sale Prospectus, and the Prospectus in the table (and corresponding footnotes) under the caption "Principal and Selling Stockholders" (with respect to each Selling Stockholder, the "**Selling Stockholder Information**") therein.

(i) (i) None of such Selling Stockholder or any of its subsidiaries, or, to the knowledge of such Selling Stockholder, any director, officer, employee, agent, representative, or affiliate thereof, is a Person that is, or is owned or controlled by one or more Persons that are:

(A) the subject of any Sanctions, or

(B) located, organized or resident in a country or territory that is the subject of Sanctions (including, without limitation, Crimea, Cuba, Iran, North Korea and Syria).

(ii) Such Selling Stockholder will not, directly or indirectly, use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other Person:

(A) to fund or facilitate any activities or business of or with any Person or in any country or territory that, at the time of such funding or facilitation, is the subject of Sanctions; or

(B) in any other manner that will result in a violation of Sanctions by any Person (including any Person participating in the offering, whether as underwriter, advisor, investor or otherwise).

(iii) For the past 5 years, such Selling Stockholder has not knowingly engaged in, is not now knowingly engaged in, and will not engage in, any dealings or transactions with any Person, or in any country or territory, that at the time of the dealing or transaction is or was the subject of Sanctions.

(iv) (a) None of such Selling Stockholder or its subsidiaries, or, to the knowledge of such Selling Stockholder, any director, officer, employee, agent, representative, or affiliate thereof has taken or has present intention to take any action in furtherance of an offer, payment, promise to pay, or authorization or approval of the payment giving or receipt of money, property, gifts, entertainment or anything else of value, directly or indirectly, to any Government Official in order to influence official action, or to any person in violation of any applicable anti-corruption laws; (b) such Selling Stockholder and its subsidiaries have conducted their businesses in compliance with applicable anti-corruption laws and have instituted and maintained policies and procedures reasonably designed to promote and achieve compliance with such laws and with the representations and warranties contained herein; and (c) neither the Selling Stockholder nor any of its subsidiaries will use, directly or indirectly, the proceeds of the offering in furtherance of an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any person in violation of any applicable anti-corruption laws.

(v) The operations of such Selling Stockholder and its subsidiaries are and have been conducted at all times in material compliance with all applicable Anti-Money Laundering Laws, and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving such Selling Stockholder or any of its subsidiaries with respect to the Anti-Money Laundering Laws is pending or, to the best knowledge of the Selling Stockholder, threatened.



3. *Agreements to Sell and Purchase.* Each Selling Stockholder, severally and not jointly, hereby agrees to sell to the several Underwriters, and each Underwriter, upon the basis of the representations and warranties herein contained, but subject to the conditions hereinafter stated, agrees, severally and not jointly, to purchase from such Selling Stockholder at \$[•] a share (the “**Purchase Price**”) the number of Firm Shares (subject to such adjustments to eliminate fractional shares as you may determine) set forth opposite such Selling Stockholder’s name in Schedule II hereto under the heading “Firm Shares.”.

On the basis of the representations and warranties contained in this Agreement, and subject to its terms and conditions, each Selling Stockholder, severally and not jointly, hereby agrees to sell to the Underwriters up to such number of Additional Shares set forth opposite such Selling Stockholder’s name in Schedule II hereto under the heading “Additional Shares” (each Selling Stockholder selling such number of Additional Shares equal to the product obtained by multiplying (i) the total number of Additional Shares for which the Underwriters exercise their option pursuant to this Section 3 and (ii) a fraction, the numerator of which is the number of Additional Shares set forth opposite such Selling Stockholder’s name in Schedule II hereto under the heading “Additional Shares” and the denominator of which is the total number of Additional Shares) and the Underwriters shall have the right to purchase from such Selling Stockholders up to an aggregate of [•] Additional Shares at the Purchase Price, provided, however, that the amount paid by the Underwriters for any Additional Shares shall be reduced by an amount per share equal to any dividends declared by the Company and payable on the Firm Shares but not payable on such Additional Shares. You may exercise this right on behalf of the Underwriters in whole or from time to time in part by giving written notice not later than 30 days after the date of this Agreement. Any exercise notice shall specify the number of Additional Shares to be purchased by the Underwriters and the date on which such shares are to be purchased. Each purchase date must be at least one business day after the written notice is given and may not be earlier than the closing date for the Firm Shares nor later than ten business days after the date of such notice. On each day, if any, that Additional Shares are to be purchased (an “**Option Closing Date**”), each Underwriter agrees, severally and not jointly, to purchase the number of Additional Shares (subject to such adjustments to eliminate fractional shares as you may determine) that bears the same proportion to the total number of Additional Shares to be purchased on such Option Closing Date as the number of Firm Shares set forth in Schedule I hereto opposite the name of such Underwriter bears to the total number of Firm Shares.

The Company and each Selling Stockholder hereby agrees that, without the prior written consent of Morgan Stanley and Goldman Sachs on behalf of the Underwriters, it will not during the period ending 90 days after the date of the Prospectus (the “**Restricted Period**”), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another,

in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise or (3) file any registration statement with the Commission relating to the offering of any shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock.

The restrictions contained in the preceding paragraph shall not apply to (a) the Shares to be sold hereunder, (b) the issuance by the Company of shares of Common Stock or securities convertible into or exercisable for Common Stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options, in each case outstanding on the date hereof and described in the Time of Sale Prospectus, (c) grants of stock options, stock awards, restricted stock or other equity awards and the issuance of Common Stock or securities convertible into or exercisable for Common Stock (whether upon the exercise of stock options or otherwise) to employees, officers, directors, advisors, or consultants of the Company pursuant to the terms of a plan in effect on the date hereof and described in the Time of Sale Prospectus, (d) the entry into an agreement providing for the issuance by the Company of Common Stock or securities convertible into, exercisable for or which are otherwise exchangeable for or represent the right to receive Common Stock in connection with (x) the acquisition by the Company or any of its subsidiaries of the securities, business, technology, property or other assets of another person or entity or pursuant to an employee benefit plan assumed by the Company in connection with such acquisition, and the issuance of any Common Stock or securities convertible into, exercisable for or which are otherwise exchangeable for or represent the right to receive Common Stock pursuant to any such agreement or (y) the Company's joint ventures, commercial relationships and other strategic transactions, provided that the aggregate number of shares of Common Stock securities convertible into, exercisable for or which are otherwise exchangeable for or represent the right to receive Common Stock that the Company may sell or issue or agree to sell or issue pursuant to this clause (d) shall not exceed 5% of the total number of shares of Common Stock outstanding immediately following the completion of the transactions contemplated by this Agreement and all recipients of any such securities shall enter into a lock-up letter substantially in the form of Exhibit A covering the remainder of the Restricted Period, (e) the establishment or amendment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, provided that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by the Company regarding the establishment or amendment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period, (f) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date hereof and described in the Time of Sale Prospectus or any assumed benefit plan contemplated by clause (d), (g) transactions relating to shares of Common Stock or other securities acquired in the offering or in open market transactions after the completion of the offering, (h) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock (i) as a bona fide gift, or for bona fide

estate planning purposes, upon death or by will, testamentary document or intestate succession, (ii) to an immediate family member of a Selling Stockholder or to any trust for the direct or indirect benefit of a Selling Stockholder or the immediate family of a Selling Stockholder (for purposes of this agreement, “immediate family” shall mean any relationship by blood, current or former marriage or adoption, not more remote than first cousin), (iii) not involving a change in beneficial ownership, or (iv) if the Selling Stockholder is a trust, to any beneficiary of the Selling Stockholder or the estate of any such beneficiary, (i) distributions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to stockholders, direct or indirect affiliates (within the meaning set forth in Rule 405 under the Securities Act of 1933, as amended), current or former partners (general or limited), members or managers of the Selling Stockholder, as applicable, or to the estates of any such stockholders, affiliates, partners, members or managers, (j) (i) the receipt by the Selling Stockholder from the Company of shares of Common Stock upon the exercise of options or warrants, insofar as such options or warrants are outstanding as of the date of the Prospectus pursuant to stock plans disclosed in the Prospectus, *provided* that the shares of Common Stock received upon exercise of such option or warrant shall remain subject to a lockup agreement in the form of Exhibit A or (ii) the transfer of shares of Common Stock or any securities convertible into Common Stock to the Company upon a vesting event of the Company’s securities or upon the exercise of options or warrants to purchase the Company’s securities on a “cashless” or “net exercise” basis to the extent permitted by the instruments representing such options or warrants and only for such options or warrants that are scheduled to expire during the Restricted Period, so long as such “cashless” exercise or “net exercise” is effected solely by the surrender of outstanding options or warrants to the Company, and the Company’s cancellation of all or a portion thereof to pay the exercise price and/or withholding tax obligations, but for the avoidance of doubt, excluding all methods of exercise that would involve a sale of any shares of Common Stock relating to options or warrants, whether to cover the applicable exercise price, withholding tax obligations or otherwise, *provided* that in the case of either (j)(i) or (j)(ii), no filing under Section 16(a) of the Exchange Act, or any other public filing or disclosure of such receipt or transfer by or on behalf of a Selling Stockholder shall be required or shall be voluntarily made within 30 days after the date of the Prospectus, and after such 30<sup>th</sup> day, any filing under Section 16(a) of the Exchange Act shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described in (i) or (ii), as the case may be, (B) no shares were sold by the reporting person and (C) in the case of (i), the shares received upon exercise of the option are subject to a lock-up agreement with the Underwriters, (k) the transfer of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock that occurs by operation of law pursuant to a qualified domestic order in connection with a divorce settlement or other court order, (l) any transfer of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to the Company pursuant to arrangements under which the Company has the option to repurchase such shares or a right of first refusal with respect to transfers of such shares, and (m) the transfer of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the board of directors of the Company, made

to all holders of Common Stock involving a change of control, *provided* that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Common Stock owned by any Selling Stockholder shall remain subject to the restrictions contained in this agreement; *provided* that in the case of any sale, transfer or distribution pursuant to clause (g), (h), (i), or (k), no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall be required or shall be voluntarily made during the Restricted Period; and *provided further* that in the case of any transfer pursuant to clause (k) or (l), any filings under Section 16(a) of the Exchange Act shall state that the transfer is by operation of law, court order, in connection with a divorce settlement, or a repurchase by the Company, as the case may be.

In addition, each Selling Stockholder, agrees that, without the prior written consent of Morgan Stanley and Goldman Sachs on behalf of the Underwriters, it will not, during the Restricted Period, make any demand for, or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. Each Selling Stockholder consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of any Shares held by such Selling Stockholder except in compliance with the foregoing restrictions.

4. *Terms of Public Offering.* The Selling Stockholders are advised by you that the Underwriters propose to make a public offering of their respective portions of the Shares as soon after the Registration Statement and this Agreement have become effective as in your judgment is advisable. The Selling Stockholders are further advised by you that the Shares are to be offered to the public initially at \$[•] a share (the "**Public Offering Price**") and to certain dealers selected by you at a price that represents a concession not in excess of \$[•] a share under the Public Offering Price, and that any Underwriter may allow, and such dealers may reallow, a concession, not in excess of \$[•] a share, to any Underwriter or to certain other dealers.

5. *Payment and Delivery.* Payment for the Firm Shares to be sold by each Selling Stockholder shall be made to such Selling Stockholder in Federal or other funds immediately available in New York City against delivery of such Firm Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on November [•], 2017, or at such other time on the same or such other date, not later than November [•], 2017, as shall be designated in writing by you. The time and date of such payment are hereinafter referred to as the "**Closing Date.**"

Payment for any Additional Shares to be sold by each Selling Stockholder shall be made to such Selling Stockholder in Federal or other funds immediately available in New York City against delivery of such Additional Shares for the respective accounts of the several Underwriters at 10:00 a.m., New York City time, on the date specified in the corresponding notice described in Section 3 or at such other time on the same or on such other date, in any event not later than November [•], 2017, as shall be designated in writing by you.

The Firm Shares and Additional Shares shall be registered in such names and in such denominations as you shall request in writing not later than one full business day prior to the Closing Date or the applicable Option Closing Date, as the case may be. The Firm Shares and Additional Shares shall be delivered to you on the Closing Date or an Option Closing Date, as the case may be, for the respective accounts of the several Underwriters, with any transfer taxes payable in connection with the transfer of the Shares to the Underwriters duly paid, against payment of the Purchase Price therefor.

6. *Conditions to the Underwriters' Obligations.* The obligations of the Selling Stockholders to sell the Shares to the Underwriters and the several obligations of the Underwriters to purchase and pay for the Shares on the Closing Date are subject to the condition that the Registration Statement shall have become effective not later than [4:30 P. M.] (New York City time) on the date hereof.

The several obligations of the Underwriters are subject to the following further conditions:

(a) Subsequent to the execution and delivery of this Agreement and prior to the Closing Date:

(i) there shall not have occurred any downgrading, nor shall any notice have been given of any intended or potential downgrading or of any review for a possible change that does not indicate the direction of the possible change, in the rating accorded any of the securities of the Company by any "nationally recognized statistical rating organization," as such term is defined in Section 3(a)(62) of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**"); and

(ii) there shall not have occurred any change, or any development involving a prospective change, in the condition, financial or otherwise, or in the earnings, business or operations of the Company and its subsidiaries, taken as a whole, from that set forth in the Time of Sale Prospectus that, in your judgment, is material and adverse and that makes it, in your judgment, impracticable to market the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus.

(b) The representations and warranties of the Selling Stockholders contained in this Agreement shall be true and correct in all material respects as of the Closing Date and that the Selling Stockholders shall have complied in all material respects with all of the agreements and satisfied in all material respects all of the conditions on their part to be performed or satisfied hereunder on or before the Closing Date.

(c) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed on behalf of the Company by an executive officer of the Company, to the effect set forth in Section 6(a)(i) above and to the effect that the representations and warranties of the Company contained in this Agreement are true and correct as of the Closing Date and that the Company has complied in all material respects with all of the agreements and satisfied in all material respects all of the conditions on its part to be performed or satisfied hereunder on or before the Closing Date.

The officer signing and delivering such certificate may rely upon his or her knowledge as to proceedings threatened.

(d) The Underwriters shall have received on the Closing Date an opinion and negative assurance letter of Cooley LLP (“**Cooley**”), outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

(e) The Underwriters shall have received on the Closing Date opinions of Whalen LLP, counsel for certain of the Selling Stockholders, and Maples and Calder, Cayman Islands counsel for certain of the Selling Stockholders, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

(f) The Underwriters shall have received on the Closing Date an opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation (“**WSGR**”), counsel for the Underwriters, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives.

With respect to Section 6(d) and 6(f), Cooley and WSGR, may state that their opinions and beliefs are based upon their participation in the preparation of the Registration Statement, the Time of Sale Prospectus and the Prospectus and any amendments or supplements thereto and review and discussion of the contents thereof, but are without independent check or verification, except as specified. With respect to Section 6(e) above, Whalen LLP may rely upon an opinion or opinions of counsel for any Selling Stockholders and, with respect to factual matters and to the extent such counsel deems appropriate, upon the representations of each Selling Stockholder contained herein and in the Custody Agreement and Power of Attorney of such Selling Stockholder and in other documents and instruments; *provided* that (A) each such counsel for the Selling Stockholders is satisfactory to your counsel, (B) a copy of each opinion so relied upon is delivered to you and is in form and substance satisfactory to your counsel, (C) copies of such Custody Agreements and Powers of Attorney and of any such other documents and instruments shall be delivered to you and shall be in form and substance satisfactory to your counsel and (D) such counsel shall state in their opinion that they are justified in relying on each such other opinion.

The opinion of Cooley described in Section 6(d) above (and any opinions of counsel for any Selling Stockholder referred to in the immediately preceding paragraph) shall be rendered to the Underwriters at the request of the Company or one or more of the Selling Stockholders, as the case may be, and shall so state therein.

(g) The Underwriters shall have received, on each of the date hereof and the Closing Date, a letter dated the date hereof or the Closing Date, as the case may be, in form and substance satisfactory to the Underwriters, from BDO containing statements and information of the type ordinarily included in accountants’ “comfort letters” to

underwriters with respect to the financial statements and certain financial information contained in the Registration Statement, the Time of Sale Prospectus and the Prospectus; *provided* that the letter delivered on the Closing Date shall use a “cut-off date” not earlier than the date hereof.

(h) The “lock-up” agreements, each substantially in the form of Exhibit A hereto, between you and the officers and directors of the Company and the Selling Stockholders relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to you on or before the date hereof, shall be in full force and effect on the Closing Date.

(i) The Underwriters shall have received on the Closing Date an opinion of Squire Patton Boggs (UK) LLP, United Kingdom outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives and counsel for the Underwriters.

(j) The Underwriters shall have received on the Closing Date an opinion of Schuler Renggli, Switzerland outside counsel for the Company, dated the Closing Date, in form and substance reasonably satisfactory to the Representatives and counsel for the Underwriters.

(k) The Underwriters shall have received on the Closing Date a certificate, dated the Closing Date and signed on behalf of the Selling Stockholders by the Attorneys-in-Fact, to the effect that the representations and warranties of the Selling Stockholders contained in this Agreement are true and correct as of the Closing Date and that the Selling Stockholders have complied with all of the agreements and satisfied all of the conditions on their part to be performed or satisfied hereunder on or before the Closing Date.

(l) The several obligations of the Underwriters to purchase Additional Shares hereunder are subject to the delivery to you on the applicable Option Closing Date of the following:

(i) a certificate, dated the Option Closing Date and signed by an executive officer of the Company, confirming that the certificate delivered on the Closing Date pursuant to Section 6(c) hereof remains true and correct as of such Option Closing Date;

(ii) a certificate, dated the Option Closing Date and signed on behalf of the Selling Stockholders by the Attorneys-in-Fact, confirming that the certificate delivered on the Closing Date pursuant to Section 6(k) hereof remains true and correct as of such Option Closing Date;

(iii) an opinion and negative assurance letter of Cooley, outside counsel for the Company, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to substantially the same effect as the opinion required by Section 6(d) hereof;

(iv) an opinion of WSGR, counsel for the Underwriters, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to substantially the same effect as the opinion required by Section 6(f) hereof;

(v) an opinion of Whalen LLP, outside counsel for the Selling Stockholders, dated the Option Closing Date, relating to the Additional Shares to be purchased on such Option Closing Date and otherwise to the same effect as the opinion required by Section 6(e) hereof;

(vi) a letter dated the Option Closing Date, in form and substance satisfactory to the Underwriters, from BDO, independent public accountants, substantially in the same form and substance as the letter furnished to the Underwriters pursuant to Section 6(g) hereof; *provided* that the letter delivered on the Option Closing Date shall use a “cut-off date” not earlier than three business days prior to such Option Closing Date; and

(vii) such other documents as you may reasonably request with respect to the good standing of the Company, the due authorization and issuance of the Additional Shares to be sold on such Option Closing Date and other matters related to the issuance of such Additional Shares.

7. *Covenants of the Company.* The Company covenants with each Underwriter as follows:

(a) To furnish to you, without charge, [•] conformed copies of the Registration Statement (including exhibits thereto) and for delivery to each other Underwriter a conformed copy of the Registration Statement (without exhibits thereto) and so long as delivery of a prospectus by an Underwriter or dealer is required by the Securities Act (including in circumstances where such requirement may be satisfied pursuant to Rule 172 under the Securities Act) (the “**Prospectus Delivery Period**”) to furnish to you in New York City, without charge, as many copies of the Time of Sale Prospectus, the Prospectus and any supplements and amendments thereto or to the Registration Statement as you may reasonably request.

(b) Before amending or supplementing the Registration Statement, the Time of Sale Prospectus or the Prospectus, to furnish to you a copy of each such proposed amendment or supplement and not to file any such proposed amendment or supplement to which you reasonably object, and to file with the Commission within the applicable period specified in Rule 424(b) under the Securities Act any prospectus required to be filed pursuant to such Rule.

(c) To furnish to you a copy of each proposed free writing prospectus to be prepared by or on behalf of, used by, or referred to by the Company and not to use or refer to any proposed free writing prospectus to which you reasonably object.



(d) Not to take any action that would result in an Underwriter or the Company being required to file with the Commission pursuant to Rule 433(d) under the Securities Act a free writing prospectus prepared by or on behalf of the Underwriter that the Underwriter otherwise would not have been required to file thereunder.

(e) If the Time of Sale Prospectus is being used to solicit offers to buy the Shares at a time when the Prospectus is not yet available to prospective purchasers and any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Time of Sale Prospectus in order to make the statements therein, in the light of the circumstances, not misleading, or if any event shall occur or condition exist as a result of which the Time of Sale Prospectus conflicts with the information contained in the Registration Statement then on file, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Time of Sale Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to any dealer upon request, either amendments or supplements to the Time of Sale Prospectus so that the statements in the Time of Sale Prospectus as so amended or supplemented will not, in the light of the circumstances when the Time of Sale Prospectus is delivered to a prospective purchaser, be misleading or so that the Time of Sale Prospectus, as amended or supplemented, will no longer conflict with the Registration Statement, or so that the Time of Sale Prospectus, as amended or supplemented, will comply with applicable law.

(f) If, during such period after the first date of the public offering of the Shares as in the opinion of counsel for the Underwriters the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is required by law to be delivered in connection with sales by an Underwriter or dealer, any event shall occur or condition exist as a result of which it is necessary to amend or supplement the Prospectus in order to make the statements therein, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, not misleading, or if, in the opinion of counsel for the Underwriters, it is necessary to amend or supplement the Prospectus to comply with applicable law, forthwith to prepare, file with the Commission and furnish, at its own expense, to the Underwriters and to the dealers (whose names and addresses you will furnish to the Company) to which Shares may have been sold by you on behalf of the Underwriters and to any other dealers upon request, either amendments or supplements to the Prospectus so that the statements in the Prospectus as so amended or supplemented will not, in the light of the circumstances when the Prospectus (or in lieu thereof the notice referred to in Rule 173(a) of the Securities Act) is delivered to a purchaser, be misleading or so that the Prospectus, as amended or supplemented, will comply with applicable law.

(g) To endeavor to qualify the Shares for offer and sale under the securities or Blue Sky laws of such jurisdictions as you shall reasonably request, *provided* that the Company shall not be required to (i) qualify as a foreign corporation or other entity or as a dealer in securities in any such jurisdiction where it would not otherwise be required to so qualify, (ii) file any general consent to service of process in any such jurisdiction or (iii) subject itself to taxation in any such jurisdiction if it is not otherwise so subject.

(h) To make generally available (which may be satisfied by filing with the Commission on its Electronic Data Gathering, Analysis and Retrieval System) to the Company's security holders and to you as soon as practicable an earnings statement covering a period of at least twelve months beginning with the first fiscal quarter of the Company occurring after the date of this Agreement which shall satisfy the provisions of Section 11(a) of the Securities Act and the rules and regulations of the Commission thereunder.

(i) To promptly notify the Representatives if the Company ceases to be an Emerging Growth Company at any time prior to the later of (a) completion of the distribution of the Shares within the meaning of the Securities Act and (b) completion of the Restricted Period referred to in Section 3.

(j) If at any time during the Prospectus Delivery Period and following the distribution of any Written Testing-the-Waters Communication there occurred or occurs an event or development as a result of which such Written Testing-the-Waters Communication as then amended or supplemented included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time delivered to a purchaser, not misleading, the Company will promptly notify Morgan Stanley and Goldman Sachs and will promptly amend or supplement, at its own expense, such Written Testing-the-Waters Communication to eliminate or correct such untrue statement or omission.

(k) The Company will apply the net proceeds received by it from the sale of the Shares as described in the Registration Statement, the Time of Sale Prospectus and the Prospectus under the heading "Use of proceeds".

(l) The Company will not take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(m) The Company will not take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(n) If any Selling Stockholder is not a U.S. person for U.S. federal income tax purposes, the Company will deliver to each Underwriter (or its agent), on or before the Closing Date, (i) a certificate with respect to the Company's status as a "United States real property holding corporation," dated not more than thirty (30) days prior to the Closing Date, as described in Treasury Regulations Sections 1.897-2(h) and 1.1445-2(c)(3), and (ii) proof of delivery to the IRS of the required notice, as described in Treasury Regulations 1.897-2(h)(2).

8. *Covenants of the Selling Stockholders.* Each Selling Stockholder, severally and not jointly, covenants with each Underwriter as follows:

(a) To deliver to each Underwriter (or its agent), prior to or at the Closing Date, a properly completed and executed Internal Revenue Service (“**IRS**”) Form W-9 or an IRS Form W-8, as appropriate, together with all required attachments to such form.

(b) To deliver a ‘lock-up’ agreement substantially in the form of Exhibit A.

(c) To not take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Shares.

(d) To not directly or indirectly use the proceeds of the offering of the Shares hereunder, or lend, contribute or otherwise make available such proceeds to a subsidiary, joint venture partner or other person or entity (i) to fund or facilitate any activities of or business with any person that, at the time of such funding or facilitation, is the subject or target of Sanctions, (ii) to fund or facilitate any activities of or business in a country or territory that is the subject or target of Sanctions, including, without limitation, Crimea, Cuba, Iran, North Korea and Syria, or (iii) in any other manner that will result in a violation by any person (including any person participating in the transaction, whether as underwriter, advisor, investor or otherwise) of Sanctions.

9. *Expenses.* Whether or not the transactions contemplated in this Agreement are consummated or this Agreement is terminated, the Company agrees to pay or cause to be paid the following expenses: (i) the fees, disbursements and expenses of the Company’s counsel, the Company’s accountants and one counsel for the Selling Stockholders in connection with the registration and delivery of the Shares under the Securities Act and all other fees or expenses in connection with the preparation and filing of the Registration Statement, any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, any free writing prospectus prepared by or on behalf of, used by, or referred to by the Company and amendments and supplements to any of the foregoing, including all printing costs associated therewith, and the mailing and delivering of copies thereof to the Underwriters and dealers, in the quantities hereinabove specified, (ii) all costs and expenses related to the transfer and delivery of the Shares to the Underwriters, including any transfer or other taxes payable thereon, (iii) the cost of printing or producing any Blue Sky or legal investment memorandum in connection with the offer and sale of the Shares under state securities laws and all expenses in connection with the qualification of the Shares for offer and sale under state securities laws as provided in Section 7(g) hereof, including filing fees and the reasonable fees and disbursements of counsel for the Underwriters in connection with such qualification and in connection with the Blue Sky or legal investment memorandum, (iv) all filing fees and the reasonable fees and disbursements of counsel to the Underwriters incurred in connection with the review and qualification of the offering of the Shares by FINRA (provided, that, the amount payable by the Company with respect to fees and disbursements of counsel for the Underwriters pursuant to subsections (iii) and (iv) shall not exceed \$30,000), (v) the costs and charges of any transfer agent, registrar or depository, (vi) the costs and expenses of the Company relating to investor presentations on any “road show” undertaken in connection with the marketing of the offering of the Shares (with the Underwriters agreeing to pay all costs and expenses related to their participation in investor

presentations on any “road show” undertaken in connection with the marketing of the offering of the Shares), including expenses associated with the preparation or dissemination of any electronic road show, expenses associated with the production of road show slides and graphics, fees and expenses of any consultants engaged in connection with the road show presentations with the prior approval of the Company, travel and lodging expenses of the officers of the Company and any such consultants, and fifty percent (50%) of the cost of any aircraft chartered in connection with the road show (the remaining fifty percent (50%) of the costs of such aircraft to be paid by the Underwriters), (viii) the document production charges and expenses associated with printing this Agreement and (ix) all other costs and expenses incident to the performance of the obligations of the Company hereunder for which provision is not otherwise made in this Section. It is understood, however, that except as provided in this Section, Section 11 entitled “Indemnity and Contribution” and the last paragraph of Section 13 below, the Underwriters will pay all of their costs and expenses, including fees and disbursements of their counsel, stock transfer taxes payable on resale of any of the Shares by them and any advertising expenses connected with any offers they may make and all travel and other expenses of the Underwriters or any of their employees incurred by them in connection with participation in investor presentations on any “road show” undertaken in connection with the marketing of the offering of the Shares. Each Selling Stockholder, severally, agrees with the Company and the several Underwriters that such Selling Stockholder shall pay all underwriting discounts and commissions and all transfer taxes on the sale by the Selling Stockholders of the Shares to the Underwriters, the fees and disbursements of any counsel to such Selling Stockholder (other than the fees and expenses of one counsel for the Selling Stockholders to be paid for by the Company) and all other costs and expenses incident to the performance of the obligations of the Selling Stockholders hereunder for which provision is not otherwise made in this Section.

The provisions of this Section shall not supersede or otherwise affect any agreement that the Company and the Selling Stockholders may otherwise have for the allocation of such expenses among themselves.

10. *Covenants of the Underwriters.* Each Underwriter severally covenants with the Company not to take any action that would result in the Company being required to file with the Commission under Rule 433(d) a free writing prospectus prepared by or on behalf of such Underwriter that otherwise would not be required to be filed by the Company thereunder, but for the action of the Underwriter.

11. *Indemnity and Contribution.* (a) The Company agrees to indemnify and hold harmless each Underwriter, each person, if any, who controls any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, and each affiliate of any Underwriter within the meaning of Rule 405 under the Securities Act from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing

prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any “road show” as defined in Rule 433(h) under the Securities Act (a “road show”), or the Prospectus or any amendment or supplement thereto, or any Written Testing-the-Waters Communication or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, except insofar as such losses, claims, damages or liabilities are caused by any such untrue statement or omission or alleged untrue statement or omission based upon information relating to any Underwriter furnished to the Company in writing by such Underwriter through you expressly for use therein (the “Underwriter Information”).

(b) Each Selling Stockholder agrees, severally and not jointly, to indemnify and hold harmless the Company, its directors, its officers who sign the Registration Statement, the Underwriters and each person, if any, who controls the Company or any Underwriter within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act, from and against any and all losses, claims, damages and liabilities (including, without limitation, any legal or other expenses reasonably incurred in connection with defending or investigating any such action or claim) caused by any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show, or the Prospectus or any amendment or supplement thereto, or any Written Testing the Waters Communication or caused by any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, only to the extent such losses, claims, damages or liabilities are caused by any untrue statement or omission or alleged untrue statement or omission made in reliance on and in conformity with the Selling Stockholder Information and provided, further, that the aggregate liability of any Selling Stockholder pursuant to this subsection (b) shall be limited to an amount equal to the aggregate Public Offering Price, less underwriting discounts and commissions, of the Shares sold by such Selling Stockholder under this Agreement (with respect to each Selling Stockholder, the “Selling Stockholder Proceeds”).

(c) Each Underwriter agrees, severally and not jointly, to indemnify and hold harmless the Company, the Selling Stockholders, the Company’s directors, the Company’s officers who sign the Registration Statement and each person, if any, who controls the Company or any Selling Stockholder within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Underwriter, but only with reference to information relating to such Underwriter furnished to the Company in writing by such Underwriter expressly for use in the Registration Statement or any amendment thereof, any preliminary prospectus, the Time of Sale Prospectus or any amendment or supplement thereto, any issuer free writing prospectus as defined in Rule 433(h) under the Securities Act, any Company information that the Company has filed, or is required to file, pursuant to Rule 433(d) under the Securities Act, any road show, or the Prospectus or any amendment or supplement thereto, or any Written Testing the Waters Communication.

(d) In case any proceeding (including any governmental investigation) shall be instituted involving any person in respect of which indemnity may be sought pursuant to Section 11(a), 11(b) or 11(c), such person (the “**indemnified party**”) shall promptly notify the person against whom such indemnity may be sought (the “**indemnifying party**”) in writing and the indemnifying party, upon request of the indemnified party, shall retain counsel reasonably satisfactory to the indemnified party to represent the indemnified party and any others the indemnifying party may designate in such proceeding and shall pay the reasonably incurred, documented fees and disbursements of such counsel related to such proceeding. In any such proceeding, any indemnified party shall have the right to retain its own counsel, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the indemnifying party and the indemnified party shall have mutually agreed in writing to the retention of such counsel; (ii) the indemnifying party has failed within a reasonable time to retain counsel reasonably satisfactory to the indemnified party; (iii) the indemnified party shall have reasonably concluded that there may be legal defenses available to it that are different from or in addition to those available to the indemnifying party; or (iv) the named parties to any such proceeding (including any impleaded parties) include both the indemnifying party and the indemnified party and representation of both parties by the same counsel would be inappropriate due to actual or potential differing interests between them. It is understood that the indemnifying party shall not, in respect of the legal expenses of any indemnified party in connection with any proceeding or related proceedings in the same jurisdiction, be liable for the fees and expenses of more than one separate firm (in addition to any local counsel) for all such indemnified parties and that all such fees and expenses shall be reimbursed as they are incurred. Such firm shall be designated in writing by the Representatives, in the case of parties indemnified pursuant to Section 11(a), and by the Company in the case of parties indemnified pursuant to Section 11(b) and Section 11(c). The indemnifying party shall not be liable for any settlement of any proceeding effected without its written consent, but if settled with such consent or if there be a final judgment for the plaintiff, the indemnifying party agrees to indemnify the indemnified party from and against any loss or liability by reason of such settlement or judgment. Notwithstanding the foregoing sentence, if at any time an indemnified party shall have requested an indemnifying party to reimburse the indemnified party for fees and expenses of counsel as contemplated by the second and third sentences of this paragraph, the indemnifying party agrees that it shall be liable for any settlement of any proceeding effected without its written consent if (i) such settlement is entered into (A) more than 90 days after receipt by such indemnifying party of the aforesaid request and (B) more than 15 days after receipt by such indemnifying party of notice specifying the terms of such settlement and that the indemnified party intends to enter into such settlement, and (ii) such indemnifying party shall not have reimbursed the indemnified party in accordance with such request prior to the date of such settlement. No indemnifying party shall, without the prior written consent of the indemnified party, effect any settlement of any pending or threatened proceeding in respect of which any indemnified party is or could have been a party and indemnity could have been sought

hereunder by such indemnified party, unless such settlement (i) includes an unconditional release of such indemnified party from all liability on claims that are the subject matter of such proceeding and (ii) does not include a statement as to or an admission of fault, culpability or a failure to act, by or on behalf of any indemnified party.

(e) To the extent the indemnification provided for in Section 11(a), 11(b) or 11(c) is unavailable to an indemnified party or insufficient in respect of any losses, claims, damages or liabilities referred to therein, then each indemnifying party under such paragraph, in lieu of indemnifying such indemnified party thereunder, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages or liabilities (i) in such proportion as is appropriate to reflect the relative benefits received by the indemnifying party or parties on the one hand and the indemnified party or parties on the other hand from the offering of the Shares or (ii) if the allocation provided by clause 9(d)(i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause 9(d)(i) above but also the relative fault of the indemnifying party or parties on the one hand and of the indemnified party or parties on the other hand in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Selling Stockholders on the one hand and the Underwriters on the other hand in connection with the offering of the Shares shall be deemed to be in the same respective proportions as the net proceeds from the offering of the Shares (before deducting expenses) received by each Selling Stockholder and the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover of the Prospectus, bear to the aggregate Public Offering Price of the Shares. The relative fault of each of the Company, any Selling Stockholders and the Underwriters shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company, any Selling Stockholder or by the Underwriters and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The Underwriters' respective obligations to contribute pursuant to this Section 11 are several in proportion to the respective number of Shares they have purchased hereunder, and not joint. The liability of each Selling Stockholder under the contribution agreement contained in this paragraph shall be limited to an amount equal to Selling Stockholder Proceeds less any amounts such Selling Stockholder is obligated to pay under Section 11(b).

(f) The Selling Stockholders and the Underwriters agree that it would not be just or equitable if contribution pursuant to this Section 11 were determined by *pro rata* allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation that does not take account of the equitable considerations referred to in Section 11(e). The amount paid or payable by an indemnified party as a result of the losses, claims, damages and liabilities referred to in Section 11(e) shall be deemed to include, subject to the limitations set forth above, any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending any such action or claim. Notwithstanding the provisions of this Section 11, no Underwriter shall be required to contribute any amount in excess of the amount by

which the total price at which the Shares underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission and no Selling Stockholder shall be required to contribute an amount in excess of the amount by which the Selling Stockholder Proceeds exceed the amount of any damages that such Selling Stockholder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The remedies provided for in this Section 11 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any indemnified party at law or in equity.

(g) The indemnity and contribution provisions contained in this Section 11 and the representations, warranties and other statements of the Company and the Selling Stockholders contained in this Agreement shall remain operative and in full force and effect regardless of (i) any termination of this Agreement, (ii) any investigation made by or on behalf of any Underwriter, any person controlling any Underwriter or any affiliate of any Underwriter, any Selling Stockholder or any person controlling any Selling Stockholder, or by or on behalf of the Company, its officers or directors or any person controlling the Company and (iii) acceptance of and payment for any of the Shares

(h) Notwithstanding anything to the contrary in this Agreement, the aggregate liability of each Selling Stockholder under the indemnity and contribution agreements contained in this Section 11 or otherwise pursuant to this Agreement shall not exceed the Selling Stockholder Proceeds.

12. *Termination.* The Underwriters may terminate this Agreement by notice given by you to the Company, if after the execution and delivery of this Agreement and prior to the Closing Date (i) trading generally shall have been suspended or materially limited on, or by, as the case may be, any of the New York Stock Exchange, the NYSE MKT, the NASDAQ Global Market, (ii) trading of any securities of the Company shall have been suspended on any exchange, including the principal exchange where they are listed, or in any over-the-counter market, (iii) a material disruption in securities settlement, payment or clearance services in the United States shall have occurred, (iv) any moratorium on commercial banking activities shall have been declared by Federal or New York State authorities or (v) there shall have occurred any outbreak or escalation of hostilities, or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and which, singly or together with any other event specified in this clause (v), makes it, in your judgment, impracticable or inadvisable to proceed with the offer, sale or delivery of the Shares on the terms and in the manner contemplated in the Time of Sale Prospectus or the Prospectus.

13. *Effectiveness; Defaulting Underwriters.* This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.



If, on the Closing Date or an Option Closing Date, as the case may be, any one or more of the Underwriters shall fail or refuse to purchase Shares that it has or they have agreed to purchase hereunder on such date, and the aggregate number of Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase is not more than one-tenth of the aggregate number of the Shares to be purchased on such date, the other Underwriters shall be obligated severally in the proportions that the number of Firm Shares set forth opposite their respective names in Schedule I bears to the aggregate number of Firm Shares set forth opposite the names of all such non-defaulting Underwriters, or in such other proportions as you may specify, to purchase the Shares which such defaulting Underwriter or Underwriters agreed but failed or refused to purchase on such date; *provided* that in no event shall the number of Shares that any Underwriter has agreed to purchase pursuant to this Agreement be increased pursuant to this Section 13 by an amount in excess of one-ninth of such number of Shares without the written consent of such Underwriter. If, on the Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Firm Shares and the aggregate number of Firm Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Firm Shares to be purchased on such date, and arrangements satisfactory to you, the Company and the Selling Stockholders for the purchase of such Firm Shares are not made within 36 hours after such default, this Agreement shall terminate without liability on the part of any non-defaulting Underwriter, the Company or the Selling Stockholders. In any such case either you, the Company or the relevant Selling Stockholders shall have the right to postpone the Closing Date, but in no event for longer than seven days, in order that the required changes, if any, in the Registration Statement, in the Time of Sale Prospectus, in the Prospectus or in any other documents or arrangements may be effected. If, on an Option Closing Date, any Underwriter or Underwriters shall fail or refuse to purchase Additional Shares and the aggregate number of Additional Shares with respect to which such default occurs is more than one-tenth of the aggregate number of Additional Shares to be purchased on such Option Closing Date, the non-defaulting Underwriters shall have the option to (i) terminate their obligation hereunder to purchase the Additional Shares to be sold on such Option Closing Date or (ii) purchase not less than the number of Additional Shares that such non-defaulting Underwriters would have been obligated to purchase in the absence of such default. Any action taken under this paragraph shall not relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

If this Agreement is terminated pursuant to this Section 13, the Company shall not have any liability to any Underwriter except as provided in Sections 9 and 11 hereof. If this Agreement shall be terminated by the Underwriters, or any of them, because of any failure or refusal on the part of the Company or any Selling Stockholder to comply with the terms or to fulfill any of the conditions of this Agreement required to be complied with by the Company or any Selling Stockholder, or if for any reason the Company or any Selling Stockholder shall be unable to perform its obligations under this Agreement other than by reason of a default by the Underwriters or the occurrence of any of the events described in clauses (i), (iii), (iv) or (v) of Section 12, the Company (in the case of any failure to comply with the terms or fulfill the conditions of this Agreement required to be complied with by it) or the Selling Stockholders (in the case of any failure to

comply with the terms or fulfill the conditions of this Agreement required to be complied with by them), as the case may be, will reimburse the Underwriters or such Underwriters as have so terminated this Agreement with respect to themselves, severally, for all documented out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with this Agreement or the offering contemplated hereunder. Notwithstanding the foregoing sentence, if, after the Closing Date but prior to any Option Closing Date with respect to the purchase of any Additional Shares pursuant to a notice delivered by the Representatives to the Company under Section 3 hereof, the Company or the Selling Stockholders fail or refuse to comply with the terms or to fulfill any of the conditions of the Agreement in connection with such Option Closing Date, the Company (in the case of any failure to comply with the terms or fulfill the conditions of this Agreement required to be complied with by it in connection with such Option Closing Date) or the Selling Stockholders (in the case of any failure to comply with the terms or fulfill the conditions of this Agreement required to be complied with by them in connection with such Option Closing Date), as the case may be, will reimburse the Underwriters severally for all out-of-pocket expenses (including the fees and disbursements of their counsel) reasonably incurred by such Underwriters in connection with the proposed purchase of any such Additional Shares pursuant to this Agreement.

14. *Entire Agreement.* (a) This Agreement, together with any contemporaneous written agreements and any prior written agreements (to the extent not superseded by this Agreement) that relate to the offering of the Shares, represents the entire agreement between the Company and the Selling Stockholders, on the one hand, and the Underwriters, on the other hand, with respect to the preparation of any preliminary prospectus, the Time of Sale Prospectus, the Prospectus, the conduct of the offering, and the purchase and sale of the Shares.

(b) The Company acknowledges that in connection with the offering of the Shares: (i) the Underwriters have acted at arm's length, are not agents of, and owe no fiduciary duties to, the Company or any other person, (ii) the Underwriters owe the Company only those duties and obligations set forth in this Agreement and prior written agreements (to the extent not superseded by this Agreement), if any, and (iii) the Underwriters may have interests that differ from those of the Company. The Company waives to the full extent permitted by applicable law any claims it may have against the Underwriters arising from an alleged breach of fiduciary duty in connection with the offering of the Shares.

15. *Counterparts.* This Agreement may be signed in two or more counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument.

16. *Applicable Law.* This Agreement shall be governed by and construed in accordance with the internal laws of the State of New York.

17. *Headings.* The headings of the sections of this Agreement have been inserted for convenience of reference only and shall not be deemed a part of this Agreement.

18. *Notices.* All communications hereunder shall be in writing and effective only upon receipt and if to the Underwriters shall be delivered, mailed or sent to you in care of Morgan Stanley & Co. LLC, 1585 Broadway, New York, New York 10036, Attention: Equity Syndicate Desk, with a copy to the Legal Department; in care of Goldman Sachs & Co. LLC, 200 West Street, New York, New York 10282, Attention: Control Room; in care of Barclays Capital Inc., 745 Seventh Avenue, New York, New York 10019, Attention: Syndicate Registration; with a copy (which shall not constitute notice) to Wilson Sonsini Goodrich & Rosati, P.C., 1700 K Street NW, 5th Floor, Washington, DC 20006, Attention: Mark R. Fitzgerald and Michael C. Labriola; and if to the Company shall be delivered, mailed or sent to Appian Corporation, 11955 Democracy Drive, Suite 1700, Reston, VA 20190, Attention: General Counsel; and if to the Selling Stockholders shall be delivered, mailed or sent to Matthew Calkins, Mark Lynch and Christopher Winters, Attorneys-in-Fact, c/o Appian Corporation, 11955 Democracy Drive, Suite 1700, Reston, VA 20190, Attention: General Counsel.

19. *USA Patriot Act.* In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Underwriters are required to obtain, verify and record information that identifies their respective clients, including the Company, which information may include the name and address of their respective clients, as well as other information that will allow the Underwriters to properly identify their respective clients.

[signature pages follow]

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Very truly yours,

APPIAN CORPORATION

By: \_\_\_\_\_

Name: Mark Lynch

Title: Chief Financial Officer

The Selling Stockholders named in Schedule II hereto, acting severally

By: \_\_\_\_\_

Name:

Title: Attorney-in-Fact

By: \_\_\_\_\_

Name:

Title: Attorney-in-Fact

Accepted as of the date hereof

Morgan Stanley & Co. LLC  
Goldman Sachs & Co. LLC  
Barclays Capital Inc.

Acting severally on behalf of themselves and the  
several Underwriters named in Schedule I hereto

By: Morgan Stanley & Co. LLC

By: \_\_\_\_\_  
Name:  
Title:

By: Goldman Sachs & Co. LLC

By: \_\_\_\_\_  
Name:  
Title:

By: Barclays Capital Inc.

By: \_\_\_\_\_  
Name:  
Title:

<u>Underwriter</u>	<u>Number of Firm Shares To Be Purchased</u>
Morgan Stanley & Co. LLC	
Goldman Sachs & Co. LLC	
Barclays Capital Inc.	
William Blair & Company, L.L.C.	
Canaccord Genuity Inc.	
KeyBanc Capital Markets Inc.	
Cowen and Company, LLC	
SunTrust Robinson Humphrey, Inc.	
BTIG, LLC	
Total:	

SCHEDULE II

<u>Selling Stockholder</u>	<u>Firm Shares</u>	<u>Additional Shares</u>
[•]	[•]	[•]
[•]	[•]	[•]
[•]	[•]	[•]
[•]	[•]	[•]
[•]	[•]	[•]
[•]	[•]	[•]
[•]	[•]	[•]
Total:	[•]	[•]



**Time of Sale Prospectus**

1. Preliminary Prospectus issued November [•], 2017
2. [identify all free writing prospectuses filed by the Company under Rule 433(d) of the Securities Act]
3. [free writing prospectus containing a description of terms that does not reflect final terms, if the Time of Sale Prospectus does not include a final term sheet]
4. [orally communicated pricing information such as price per share and size of offering if a Rule 134 pricing term sheet is used at the time of sale instead of a pricing term sheet filed by the Company under Rule 433(d) as a free writing prospectus]

**Written Testing-the-Waters Communication**

[None.]

## FORM OF LOCK-UP LETTER

\_\_\_\_\_, 2017

Morgan Stanley & Co. LLC  
Goldman, Sachs & Co. LLC

c/o Morgan Stanley & Co. LLC  
1585 Broadway  
New York, NY 10036

c/o Goldman, Sachs & Co. LLC  
200 West Street  
New York, New York 10282

Ladies and Gentlemen:

The undersigned understands that Morgan Stanley & Co. LLC ("**Morgan Stanley**"), Goldman, Sachs & Co. LLC ("**Goldman Sachs**") and Barclays Capital Inc. ("**Barclays**") propose to enter into an Underwriting Agreement (the "**Underwriting Agreement**") with Appian Corporation, a Delaware corporation (the "**Company**"), and the Selling Stockholders named in Schedule II to the Underwriting Agreement, providing for the public offering (the "**Public Offering**") by the several Underwriters, including Morgan Stanley, Goldman Sachs and Barclays (the "**Underwriters**"), of shares of Class A common stock, par value \$0.0001 per share, of the Company (the "**Class A Common Stock**").

To induce the Underwriters that may participate in the Public Offering to continue their efforts in connection with the Public Offering, the undersigned hereby agrees that, without the prior written consent of Morgan Stanley and Goldman Sachs, collectively, the "**Representatives**" on behalf of the Underwriters, it will not, and will not publicly announce its intention to, during the period commencing on the date hereof and ending 90 days after the date of the final prospectus (the "**Restricted Period**") relating to the Public Offering (the "**Prospectus**"), (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of Class A Common Stock or Class B common stock, par value \$0.0001 per share (the "**Class B Common Stock**" and, collectively with the Class A Common Stock, the "**Common Stock**") beneficially owned (as such term is used in Rule 13d-3 of the Securities Exchange Act of 1934, as amended (the "**Exchange Act**")), by the undersigned or any other securities so owned convertible into or exercisable or exchangeable for Common Stock or (2) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the Common Stock, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing sentence shall not apply to:

(a) transactions relating to shares of Common Stock or other securities acquired in the Public Offering or in open market transactions after the completion of the Public Offering;

(b) transfers of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock (i) as a bona fide gift, or for bona fide estate planning purposes, upon death or by will, testamentary document or intestate succession, (ii) to an immediate family member of the undersigned or to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned (for purposes of this agreement, “immediate family” shall mean any relationship by blood, current or former marriage or adoption, not more remote than first cousin), (iii) not involving a change in beneficial ownership, or (iv) if the undersigned is a trust, to any beneficiary of the undersigned or the estate of any such beneficiary;

(c) distributions of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to stockholders, direct or indirect affiliates (within the meaning set forth in Rule 405 under the Securities Act of 1933, as amended), current or former partners (general or limited), members or managers of the undersigned, as applicable, or to the estates of any such stockholders, affiliates, partners, members or managers;

(d) (i) the receipt by the undersigned from the Company of shares of Common Stock upon the exercise of options or warrants, insofar as such options or warrants are outstanding as of the date of the Prospectus pursuant to stock plans disclosed in the Prospectus, *provided* that the shares of Common Stock received upon exercise of such option or warrant shall remain subject to this agreement or (ii) the transfer of shares of Common Stock or any securities convertible into Common Stock to the Company upon a vesting event of the Company’s securities or upon the exercise of options or warrants to purchase the Company’s securities on a “cashless” or “net exercise” basis to the extent permitted by the instruments representing such options or warrants, so long as such “cashless” exercise or “net exercise” is effected solely by the surrender of outstanding options or warrants to the Company, and the Company’s cancellation of all or a portion thereof to pay the exercise price and/or withholding tax obligations, but for the avoidance of doubt, excluding all methods of exercise that would involve a sale of any shares of Common Stock relating to options or warrants, whether to cover the applicable exercise price, withholding tax obligations or otherwise, *provided* that in the case of either (i) or (ii), no filing under Section 16(a) of the Exchange Act, or any other public filing or disclosure of such receipt or transfer by or on behalf of the undersigned shall be required or shall be voluntarily made within 30 days after the date of the Prospectus, and after such 30<sup>th</sup> day, any filing under Section 16(a) of the Exchange Act shall clearly indicate in the footnotes thereto that (A) the filing relates to the circumstances described in (i) or (ii), as the case may be, (B) no shares were sold by the reporting person and (C) in the case of (i), the shares received upon exercise of the option are subject to a lock-up agreement with the Underwriters of the Public Offering;

(e) sales of securities pursuant to the terms of the Underwriting Agreement;

(f) the establishment or amendment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of shares of Common Stock, *provided* that (i) such plan does not provide for the transfer of Common Stock during the Restricted Period and (ii) to the extent a public announcement or filing under the Exchange Act, if any, is required of or voluntarily made by or on behalf of the undersigned or the Company regarding the establishment or amendment of such plan, such announcement or filing shall include a statement to the effect that no transfer of Common Stock may be made under such plan during the Restricted Period;

(g) the transfer of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock that occurs by operation of law pursuant to a qualified domestic order in connection with a divorce settlement or other court order;

(h) any transfer of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock to the Company pursuant to arrangements under which the Company has the option to repurchase such shares or a right of first refusal with respect to transfers of such shares; and

(i) the transfer of shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by the Board of Directors of the Company, made to all holders of Common Stock involving a Change of Control (as defined below), *provided* that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the Common Stock owned by the undersigned shall remain subject to the restrictions contained in this agreement;

*provided* that in the case of any sale, transfer or distribution pursuant to clause (a), (b) or (c) no filing under Section 16(a) of the Exchange Act reporting a reduction in beneficial ownership of shares of Common Stock shall be required or shall be voluntarily made during the Restricted Period;

*provided further* that in the case of any transfer or distribution pursuant to clause (b), (c) or (g), each transferee, donee or distributee shall sign and deliver a lock-up letter substantially in the form of this agreement; and

*provided further* that in the case of any transfer pursuant to clause (g) or (h), any filings under Section 16(a) of the Exchange Act shall state that the transfer is by operation of law, court order, in connection with a divorce settlement, or a repurchase by the Company, as the case may be.

For purposes of clause (i), "Change of Control" shall mean the transfer (whether by tender offer, merger, consolidation or other similar transaction), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an Underwriter pursuant to the Public Offering), of the Company's voting securities if, after such transfer, such person or group of affiliated persons would hold more than 65% of the number of outstanding voting securities of the Company (or the surviving entity) and 65% of the voting control of the outstanding voting securities of the Company (or the surviving entity).

In addition, the undersigned agrees that, without the prior written consent of the Representatives on behalf of the Underwriters, it will not, in connection with the Public Offering nor during the Restricted Period, make any demand for or exercise any right with respect to, the registration of any shares of Common Stock or any security convertible into or exercisable or exchangeable for Common Stock. The undersigned also agrees and consents to the entry of stop transfer instructions with the Company's transfer agent and registrar against the transfer of the undersigned's shares of Common Stock except in compliance with the foregoing restrictions.

The undersigned further agrees that, to the extent that the terms of this agreement conflict with or are in any way inconsistent with any prior investor rights agreement, prior registration rights agreement, prior market standoff agreement or any other prior lock-up or similar prior agreement to which the undersigned and the Company may be a party, this agreement supersedes such prior agreement.

If the undersigned is an officer or director of the Company, the undersigned further agrees that the foregoing provisions shall be equally applicable to any issuer-directed shares of Common Stock the undersigned may purchase in the Public Offering.

The undersigned understands that the Company and the Underwriters are relying upon this agreement in proceeding toward consummation of the Public Offering. The undersigned further understands that this agreement is irrevocable and shall be binding upon the undersigned's heirs, legal representatives, successors and assigns.

Whether or not the Public Offering actually occurs depends on a number of factors, including market conditions. Any Public Offering will only be made pursuant to an Underwriting Agreement, the terms of which are subject to negotiation among the Company, the Selling Stockholders and the Underwriters.

Notwithstanding anything to the contrary contained herein, this agreement will automatically terminate and the undersigned will be released from all obligations hereunder upon the earliest to occur, if any, of (i) the Company, on the one hand, or the Representatives, on the other hand, advises in writing that it has determined not to proceed with the Public Offering prior to the execution of the Underwriting Agreement, (ii) the registration statement related to the Public Offering is withdrawn, (iii) the date the Underwriting Agreement (other than the provisions thereof which survive termination) shall terminate or be terminated prior to payment for and delivery of the Shares to be sold thereunder, or (iv) November 20, 2017, if the Underwriting Agreement has not been executed by such date.

This agreement and any claim, controversy or dispute arising under or related to this agreement shall be governed by and construed in accordance with the laws of the State of New York, without regard to the conflict of laws principles thereof.



Nicole C. Brookshire  
T: 617 237-9357  
nbrookshire@cooley.com

November 13, 2017

Appian Corporation  
11955 Democracy Drive, Suite 1700  
Reston, VA 20190

Ladies and Gentlemen:

You have requested our opinion, as counsel to Appian Corporation, a Delaware corporation (the "**Company**"), in connection with the filing by the Company of a Registration Statement (No. 333- ) on Form S-1 (the "**Registration Statement**") with the Securities and Exchange Commission, including a related prospectus filed with the Registration Statement (the "**Prospectus**"), covering an underwritten public offering of up to 4,370,000 shares (the "**Shares**") of the Company's Class A common stock, par value \$0.0001, to be sold by certain selling stockholders, including up to 570,000 Shares that may be sold pursuant to the exercise of an option to purchase additional shares.

Of the Shares, 4,174,800 of such shares are currently outstanding (the "**Outstanding Shares**") and 195,200 of such shares (the "**Option Shares**") are issuable pursuant to vested stock options currently outstanding (the "**Options**").

In connection with this opinion, we have examined and relied upon (a) the Registration Statement and the Prospectus, (b) the Company's Amended and Restated Certificate of Incorporation and the Company's Amended and Restated Bylaws, each as currently in effect, and (c) originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have undertaken no independent verification with respect to such matters. We have assumed the genuineness and authenticity of all documents submitted to us as originals, and the conformity to originals of all documents submitted to us as copies and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof. As to certain factual matters, we have relied upon a certificate of an officer of the Company and have not sought independently to verify such matters. Our opinion is expressed only with respect to the General Corporation Law of the State of Delaware. We express no opinion as to whether the laws of any particular jurisdiction are applicable to the subject matter hereof. We are not rendering any opinion as to compliance with any federal or state antifraud law, rule or regulation relating to securities, or to the sale or issuance thereof.

With respect to the Option Shares, we have assumed that, at the time of issuance and sale, a sufficient number of shares of the Company's Class A common stock is authorized and available for issuance and that the Option Shares are issued pursuant to the terms of the Options as are currently in effect.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that:

1. The Outstanding Shares have been validly issued and are fully paid and non-assessable.
2. The Option Shares, when issued and sold pursuant to the terms of the Options, will be validly issued, fully paid and non-assessable.

We consent to the reference to our firm under the caption "Legal Matters" in the Prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Nicole C. Brookshire  
Nicole C. Brookshire

**Subsidiaries of Appian Corporation**

<u>Name of Subsidiary</u>	<u>Jurisdiction of Organization</u>
Appian Europe Ltd	England and Wales
Appian Software Switzerland LLC	Switzerland (Zug Canton)
Appian Netherlands BV	Netherlands
Appian Software Australia PTY Ltd	Australia
Appian France SARL	France
Appian Software Italy SRL	Italy
Appian Software Germany GmbH	Germany



Consent of Independent Registered Public Accounting Firm

Appian Corporation  
Reston, Virginia

We hereby consent to the incorporation by reference in the Prospectus constituting a part of this Registration Statement of our report dated February 17, 2017, relating to the consolidated financial statements of Appian Corporation, which is contained in that Prospectus.

We also consent to the reference to us under the caption “Experts” in the Prospectus.

/s/ BDO USA, LLP

McLean, Virginia  
November 13, 2017

BDO USA, LLP, a Delaware limited liability partnership, is the U.S. member of BDO International Limited, a UK company limited by guarantee, and forms part of the international BDO network of independent member firms.

BDO is the brand name for the BDO network and for each of the BDO Member Firms.

## Forrester Research Inc.

November 10, 2017

To Whom It May Concern:

Forrester Research, Inc. ("Forrester") consents to the inclusion of its name and the language set forth below in the Registration Statement on Form S-1 filed by Appian Corporation and any related prospectus:

**“Quotes 1& 2: *“According to Forrester, the market for low-code development platforms is expected to total \$4.4 billion in 2018 and is expected to grow at a 49% compound annual growth rate to \$21.2 billion in 2022. We were included as a “Leader” in the Forrester Wave: Low-Code Development Platforms in 2017, which is an evaluation of current offering, strategy and market presence.”***

Source: Forrester, The Forrester Wave™: Low-Code Development Platforms For AD&D Pros Q4 2017, October 12, 2017 and Forrester, Vendor Landscape: A Fork In The Road For Low-Code Development Platforms, Updated November 8, 2017

**Quote 3: *“Case management. We were included as a “Leader” based on the strength of our current offering, our strategy and our market presence in the Forrester Wave: Dynamic Case Management in 2016.”***

Source: Forrester, The Forrester Wave™: Dynamic Case Management, Q1 2016, February 2, 2016

**Quote 4: *“Traditional custom enterprise software market. In addition to our current core software markets, we believe that our platform better meets certain of the needs that have been historically addressed by manually-developed custom enterprise software, which is expected to represent a \$169 billion market in 2018, according to Forrester.”***

Source: Forrester, Midyear Global Tech Market Outlook For 2017 To 2018, September 25, 2017

**Quote 5: *“This competitive differentiation is of utmost importance as 59% of enterprise IT respondents cited the desire to gain required functionality as the main motivation for developing custom enterprise software, which is not available in purchased packaged software, according to a 2014 study conducted by Forrester Consulting, which was commissioned by us.”***

Source: The Move Toward Modern Application Platforms, a commissioned study conducted by Forrester Consulting on behalf of Appian, December 2014

**Quote 6: *“According to one example cited by Forrester, the coding of custom software took an estimated 2.7 years to complete,”***

Source: Forrester, Vendor Landscape: The Fractured, Fertile Terrain Of Low-Code Application Platforms, April 11, 2016

**Quote 7: *“In the same report, Forrester found that the use of low-code software development was six to 20 times faster than traditional software development.”***

Source: Forrester, Vendor Landscape: The Fractured, Fertile Terrain Of Low-Code Application Platforms, April 11, 2016

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This consent is conditioned upon the inclusion in the Registration Statement and any related prospectus of the following language:

“The Forrester Research studies described herein, one of which was commissioned by us, represents data, research, opinions or viewpoints prepared by Forrester Research, and are not representations of fact. We have been advised by Forrester Research that its studies speak as of their original dates (and not as of the date of this prospectus) and any opinions expressed in the studies are subject to change without notice.”

Very truly yours,

Forrester Research, Inc.

/s/ Naomi Sager

Name: Naomi Sager

Title: Manager, Citations

April 17, 2017

Appian Corporation  
11955 Democracy Drive, Suite 1700  
Reston, VA 20190

Dear Sirs:

We, Lead to Market Research (“LTM Research”), a Division of Uneed Solutions, hereby consent to the filing with the Securities and Exchange Commission of a Registration Statement on Form S-1, and any amendments thereto (the “*Registration Statement*”) of Appian Corporation and any related prospectuses of (i) our name and all references thereto, and (ii) the statements set out in the Schedule hereto. We also hereby consent to the filing of this letter as an exhibit to the Registration Statement.

We further consent to the reference to our firm, under the caption “Industry and Market Data” in the Registration Statement, as acting in the capacity of an author of independent industry publications.

Yours faithfully,

/s/ James M. Stafford, III

Name: James M. Stafford, III  
Designation: Project Manager  
For and on behalf of LTM Research

## SCHEDULE

Quote 1: ***“Decision makers are increasingly recognizing the need to capitalize on these trends, with 87% of Global 2000 executives planning digital transformation projects for 2017 and 47% of Global 2000 executives citing digital transformation as their highest corporate priority for 2017, according to a survey conducted by LTM Research, an industry research firm, which was commissioned by us.”***

Quote 2: ***“Developer talent is scarce and hiring developers to create custom software is costly. According to an LTM Research survey of Global 2000 executives, which was commissioned by us, 79% of respondents said they were concerned that their digital transformation initiatives would be impacted by challenges in hiring and retaining skilled developers.”***