UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended June 30, 2020
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from ____ to ____
Commission File Number: 001-38098

APPIAN CORPORATION
(Exact Name of Registrant as Specified in its Charter)

Delaware	**54-1956084**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
7950 Jones Branch Drive **McLean, VA**	**22102**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (703) 442-8844

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading symbol	Name of each exchange on which registered
Class A Common Stock	APPN	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

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	☐	Small 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 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of August 3, 2020, there were 37,632,914 shares of the registrant's Class A common stock and 32,217,936 shares of the registrant's Class B common stock, each with a par value of $0.0001 per share, outstanding.

Table of Contents

PART I—FINANCIAL INFORMATION

Item 1. FINANCIAL STATEMENTS

APPIAN CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

	As of	
	June 30, 2020	December 31, 2019
	(unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 256,146	$ 159,755
Accounts receivable, net of allowance of $800 and $600 as of June 30, 2020 and December 31, 2019, respectively	71,853	70,408
Deferred commissions, current	15,122	14,543
Prepaid expenses and other current assets	26,289	32,955
Total current assets	369,410	277,661
Property and equipment, net	37,437	39,554
Goodwill	4,443	—
Intangible assets, net of accumulated amortization of $196 as of June 30, 2020	1,790	—
Operating right-of-use assets	23,156	24,205
Deferred commissions, net of current portion	28,694	28,979
Deferred tax assets	583	494
Other assets	5,847	592
Total assets	$ 471,360	$ 371,485
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	$ 4,128	$ 5,222
Accrued expenses	7,307	7,488
Accrued compensation and related benefits	13,183	10,691
Deferred revenue, current	87,550	82,201
Operating lease liabilities, current	5,427	3,836
Finance lease liabilities, current	1,549	1,447
Other current liabilities	592	1,395
Total current liabilities	119,736	112,280
Operating lease liabilities, net of current portion	44,142	44,416
Finance lease liabilities, net of current portion	1,556	2,375
Deferred revenue, net of current portion	4,595	7,139
Deferred tax liabilities	437	38
Other non-current liabilities	2,092	—
Total liabilities	172,558	166,248
Stockholders' equity		
Class A common stock—par value $0.0001; 500,000,000 shares authorized and 37,558,379 shares issued and outstanding as of June 30, 2020; 500,000,000 shares authorized and 34,525,386 shares issued and outstanding as of December 31, 2019	4	3
Class B common stock—par value $0.0001; 100,000,000 shares authorized and 32,281,936 shares issued and outstanding as of June 30, 2020; 100,000,000 shares authorized and 32,942,636 shares issued and outstanding as of December 31, 2019	3	3
Additional paid-in capital	458,174	340,929
Accumulated other comprehensive loss	(482)	(285)
Accumulated deficit	(158,897)	(135,413)
Total stockholders' equity	298,802	205,237
Total liabilities and stockholders' equity	$ 471,360	$ 371,485

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

APPIAN CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited, in thousands, except share and per share data)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Revenue				
Subscriptions	$ 41,418	$ 36,860	$ 91,854	$ 71,417
Professional services	25,357	28,415	53,785	54,162
Total revenue	66,775	65,275	145,639	125,579
Cost of revenue				
Subscriptions	4,701	4,036	10,084	7,621
Professional services	16,455	19,015	35,191	39,496
Total cost of revenue	21,156	23,051	45,275	47,117
Gross profit	45,619	42,224	100,364	78,462
Operating expenses				
Sales and marketing	29,086	29,992	63,258	58,583
Research and development	17,178	12,765	33,216	26,721
General and administrative	11,450	9,261	24,591	18,277
Total operating expenses	57,714	52,018	121,065	103,581
Operating loss	(12,095)	(9,794)	(20,701)	(25,119)
Other (income) expense				
Other (income) expense, net	(682)	(79)	2,432	(381)
Interest expense	128	69	271	140
Total other (income) expense	(554)	(10)	2,703	(241)
Loss before income taxes	(11,541)	(9,784)	(23,404)	(24,878)
Income tax expense	274	267	80	389
Net loss	$ (11,815)	$ (10,051)	$ (23,484)	$ (25,267)
Net loss per share:				
Basic and diluted	$ (0.17)	$ (0.16)	$ (0.35)	$ (0.39)
Weighted average common shares outstanding:				
Basic and diluted	68,369,823	64,753,044	67,949,270	64,531,089

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

APPIAN CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(unaudited, in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Net loss	$ (11,815)	$ (10,051)	$ (23,484)	$ (25,267)
Comprehensive loss, net of income taxes:				
Foreign currency translation adjustment	(214)	(490)	(197)	(194)
Total other comprehensive loss, net of income taxes	$ (12,029)	$ (10,541)	$ (23,681)	$ (25,461)

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

APPIAN CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
(unaudited, in thousands, except share data)

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance, January 1, 2020	67,468,022	$ 6	$ 340,929	$ (285)	$ (135,413)	$ 205,237
Net loss	—	—	—	—	(11,669)	(11,669)
Issuance of common stock to directors	1,946	—	—	—	—	—
Vesting of restricted stock units	46,031	—	—	—	—	—
Exercise of stock options	129,082	—	670	—	—	670
Stock-based compensation expense	—	—	3,476	—	—	3,476
Other comprehensive income	—	—	—	17	—	17
Balance, March 31, 2020	67,645,081	6	345,075	(268)	(147,082)	197,731
Net loss	—	—	—	—	(11,815)	(11,815)
Issuance of common stock from public offering, net of issuance costs	1,931,206	1	107,914	—	—	107,915
Issuance of common stock to directors	2,296	—	—	—	—	—
Vesting of restricted stock units	13,567	—	—	—	—	—
Exercise of stock options	248,165	—	1,571	—	—	1,571
Stock-based compensation expense	—	—	3,614	—	—	3,614
Other comprehensive loss	—	—	—	(214)	—	(214)
Balance, June 30, 2020	69,840,315	$ 7	$ 458,174	$ (482)	$ (158,897)	$ 298,802

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

	Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount				
Balance, January 1, 2019	63,916,437	$ 6	$ 218,284	$ 542	$ (145,640)	$ 73,192
Cumulative effect of adoption of ASC 606	—	—	—	—	60,941	60,941
Net loss	—	—	—	—	(15,216)	(15,216)
Issuance of common stock to directors	3,461	—	—	—	—	—
Vesting of restricted stock units	278,680	—	—	—	—	—
Exercise of stock options	482,444	—	1,073	—	—	1,073
Stock-based compensation expense	—	—	7,225	—	—	7,225
Other comprehensive income	—	—	—	296	—	296
Balance, March 31, 2019	64,681,022	6	226,582	838	(99,915)	127,511
Net loss	—	—	—	—	(10,051)	(10,051)
Issuance of common stock to directors	2,684	—	—	—	—	—
Vesting of restricted stock units	6,010	—	—	—	—	—
Exercise of stock options	147,852	—	914	—	—	914
Stock-based compensation expense	—	—	2,689	—	—	2,689
Other comprehensive loss	—	—	—	(490)	—	(490)
Balance, June 30, 2019	64,837,568	$ 6	$ 230,185	$ 348	$ (109,966)	$ 120,573

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

APPIAN CORPORATION AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited, in thousands)

	Six Months Ended June 30,	
	2020	**2019**
Cash flows from operating activities:		
Net loss	$ (23,484)	$ (25,267)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Depreciation and amortization	2,980	1,933
Bad debt expense	200	97
Loss on disposal of property and equipment	22	145
Deferred income taxes	(168)	(47)
Stock-based compensation	7,090	9,914
Changes in assets and liabilities:		
Accounts receivable	(2,084)	9,337
Prepaid expenses and other assets	1,922	13,453
Deferred commissions	(295)	(4,790)
Accounts payable and accrued expenses	(1,674)	5,458
Accrued compensation and related benefits	2,575	(3,181)
Other liabilities	1,271	(269)
Deferred revenue	2,310	640
Operating lease liabilities	2,378	—
Deferred rent, non-current	—	4,584
Net cash (used in) provided by operating activities	(6,957)	12,007
Cash flows from investing activities:		
Payments for acquisitions, net of cash acquired	(6,138)	—
Purchases of property and equipment	(686)	(27,689)
Net cash used in investing activities	(6,824)	(27,689)
Cash flows from financing activities:		
Principal payments on finance leases	(716)	—
Proceeds from public offering, net of underwriting discounts	108,260	—
Payments of costs related to public offerings	(18)	—
Proceeds from exercise of common stock options	2,242	1,987
Net cash provided by financing activities	109,768	1,987
Effect of foreign exchange rate changes on cash and cash equivalents	404	(134)
Net increase (decrease) in cash and cash equivalents	96,391	(13,829)
Cash and cash equivalents, beginning of period	159,755	94,930
Cash and cash equivalents, end of period	$ 256,146	$ 81,101
Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 88	$ 170
Cash paid for income taxes	$ 139	$ 116
Supplemental disclosure of non-cash financing information:		
Capital lease obligations to acquire new office furniture and fixtures	$ —	$ 3,673

The accompanying notes are an integral part of these unaudited condensed consolidated financial statements.

1. Organization and Description of Business

Appian Corporation (together with its subsidiaries, “Appian,” the “Company,” “we,” or “our”) provides a low-code automation platform that accelerates the creation of high-impact business applications, enabling our customers to automate the most important aspects of their business. Global organizations use our applications to improve customer experience, achieve operational excellence, and simplify global risk management and compliance. We were incorporated in the state of Delaware in August 1999. We are headquartered in McLean, Virginia and operate in Canada, Switzerland, the United Kingdom, France, Germany, the Netherlands, Italy, Australia, Spain, Singapore, and Sweden.

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 (“U.S. GAAP”) as contained in the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“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, 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 Annual Report on Form 10-K for the year ended December 31, 2019, filed with the Securities and Exchange Commission (the “SEC”) on February 20, 2020.

We adopted ASC 606, the new revenue recognition guidance, on January 1, 2019 using the modified retrospective method. Under this method of adoption, we recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of accumulated deficit and applied the new standard only to contracts that were not completed prior January 1, 2019.

Because we were an emerging growth company until December 31, 2019, the Jumpstart Our Business Startups Act allowed us to delay adoption of certain accounting standards such as ASC 606 and ASC 842 until such time they were made applicable to private companies. We elected to use this extended transition period, and accordingly, did not report revenues under ASC 606 or leases under ASC 842 in our Quarterly Reports on Form 10-Q during 2019. Refer to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020, for a complete reconciliation of our revenues under the old and new guidance. Prior period amounts in this Form 10-Q have been recast as if we had reported under ASC 606 for the applicable periods.

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 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, the valuation of goodwill and intangible assets, leases, costs to obtain a contract with a customer, and stock-based compensation.

The outbreak of the novel coronavirus disease ("COVID-19") has resulted in the declaration of a global pandemic and introduced a level of disruption and uncertainty into the financial markets and global economy. While we continue to monitor the developments surrounding the pandemic, as of the date of issuance of these financial statements, we are not aware of any specific events or circumstances that would require us to update our estimates, assumptions, and judgments or revise the carrying value of our assets or liabilities. However, the ultimate impact of COVID-19 on our business is not estimable at this time and will be largely dependent upon a number of factors outside of our control including the extent and duration of the outbreak as well as any mitigating actions which may be undertaken by global governments and the general public.

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.

Public Offering

In June 2020, we completed an underwritten public offering of 2,500,000 shares of our Class A common stock, of which 1,931,206 shares of Class A common stock were sold by us and 568,794 shares of Class A common stock were sold by existing stockholders. The underwriter purchased the shares from us and the selling stockholders at a price of $56.50 per share. Our net proceeds from the offering were $107.9 million, after deducting underwriting discounts and commissions and offering expenses. We did not receive any of the proceeds from the sale of shares by the selling stockholders.

Revenue Recognition

Refer to Note 3 for a detailed discussion on specific revenue recognition principles related to our major revenue streams.

Cost of Revenue

Subscriptions

Cost of subscriptions revenue consists primarily of fees paid to our third-party managed hosting providers and other third-party service providers, personnel costs such as payroll and benefits for our technology operations and customer support teams, and allocated facility costs and overhead.

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.

Concentration of Credit and Customer Risk

Our financial instruments exposed to concentration of credit and customer risk consist primarily of cash and cash equivalents and trade accounts receivable. Deposits held with banks may exceed the amount of insurance provided on such deposits. We believe the financial institutions holding 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 no additional credit risk beyond amounts provided for collection loss are inherent in accounts receivable. When accounted for under ASC 606, revenue generated from government agencies represented 19.0% and 16.8% of our revenue for the three and six months ended June 30, 2020, respectively, of which the top three federal government agencies generated 7.6% and 6.7% of our revenue for the three and six months ended June 30, 2020, respectively. Additionally, 36.8% and 35.0% of our revenue during the three and six months ended June 30, 2020, respectively, was generated from foreign customers. Revenue generated from government agencies represented 16.8% and 17.3% of our revenue for three and six months ended June 30, 2019, respectively, of which the top three federal government agencies generated 6.4% and 7.3% of our revenue for the three and six months ended June 30, 2019, respectively. Additionally, 32.9% and 32.4% of our revenue during the three and six months ended June 30, 2019, respectively, was generated from foreign customers.

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 and incorporates an estimation of expected lifetime credit losses on our receivables. 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 a $0.2 million increase in the allowance for doubtful accounts from December 31, 2019 to June 30, 2020.

Assets Recognized from the Costs to Obtain a Contract with a Customer

We capitalize the incremental costs of obtaining a contract with a customer, including sales commissions paid to our direct sales force that are incremental costs to obtaining customer contracts. These costs are recorded as deferred commissions in the condensed consolidated balance sheets. Costs to obtain a contract for a new customer or upsell are amortized over an estimated economic life of five years as sales commissions on initial sales are not commensurate with sales commissions on contract renewals. We determine the estimated economic life based on both qualitative and quantitative factors such as expected renewals, product life cycles, contractual terms, and customer attrition. We periodically review the carrying amount of deferred contract acquisition costs to determine whether events or changes in circumstances have occurred that could impact the estimated economic life. Commissions paid relating to contract renewals are deferred and amortized over the related renewal period. We also capitalize the incremental fringe benefits associated with commission expenses paid to our direct sales force. Costs to obtain a contract for professional services arrangements are expensed as incurred as the contractual period of our professional services arrangements are one year or less.

Amortization associated with commission expense is recorded to sales and marketing costs in our condensed consolidated statements of operations. Commission expense was $5.8 million and $11.1 million for the three and six months ended June 30, 2020, respectively. Commission expense was $3.6 million and $6.6 million for the three and six months ended June 30, 2019, 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.

The following table outlines useful lives of our major asset categories:

Asset Category	Useful Life (in years)
Computer software	3
Computer hardware	3
Equipment	5
Office furniture and fixtures	10
Leasehold improvements	(a)

(a) - Leasehold improvements have an estimated useful life of the shorter of the useful life of the assets or the lease term.

Impairment of Long-Lived Assets

Long-lived assets and certain intangible assets are reviewed for impairment whenever events or circumstances indicate 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 three and six months ended June 30, 2020 and June 30, 2019.

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 June 30, 2020 and December 31, 2019 because of the relatively short duration of these instruments. Our line of credit is recorded at carrying value, which approximates fair value.

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 Using Significant Unobservable Inputs

There were no instruments measured at fair value on a recurring basis using significant unobservable inputs as of June 30, 2020 and December 31, 2019.

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 containing only a service condition using the Black-Scholes option pricing model. The fair value of restricted stock units is based on the closing market price of our common stock on the Nasdaq Global Market on the date of grant. 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 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. We account for forfeitures as they occur rather than estimating expected forfeitures.

Leases

Refer to Note 4 for a detailed discussion on our policies specific to leasing arrangements.

Recent Accounting Pronouncements

Adopted

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326)* ("ASU 2016-13"), which requires entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets measured at amortized cost. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Adopting the standard did not have a material impact on our condensed consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"), which eliminates, modifies, and adds disclosure requirements for fair value measurements. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Adopting the standard did not have a material impact on our condensed consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40), Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract*, which aligns the requirements for capitalizing implementation costs in cloud computing arrangements with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. This guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Adopting the standard did not have a material impact on our condensed consolidated financial statements.

3. Revenue

Revenue Recognition

We generate subscriptions revenue primarily through the sale of software as a service ("SaaS") subscriptions bundled with maintenance and support and hosting services as well as term license subscriptions bundled with maintenance and support. We generate professional services revenue from fees for our consulting services, including application development and deployment assistance as well as training related to our platform.

The following table summarizes revenue from contracts with customers for the three and six months ended June 30, 2020 and June 30, 2019 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
SaaS subscriptions	$ 29,580	$ 22,796	$ 57,970	$ 44,074
Term license subscriptions	7,379	10,103	25,172	19,660
Maintenance and support	4,459	3,961	8,712	7,683
Professional services	25,357	28,415	53,785	54,162
Total revenue	$ 66,775	$ 65,275	$ 145,639	$ 125,579

Performance Obligations and Timing of Revenue Recognition

We primarily sell products and services that fall into the categories discussed below. Each category contains one or more performance obligations that are either (1) capable of being distinct (i.e., the customer can benefit from the product or service on its own or together with readily available resources, including those purchased separately from us) and distinct within the context of the contract (i.e., separately identified from other promises in the contract) or (2) a series of distinct products or services that are substantially the same and have the same pattern of transfer to the customer. Our term license subscriptions are delivered at a point in time while our SaaS subscriptions, maintenance and support, and professional services are delivered over time.

Subscriptions Revenue

Subscriptions 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. We generally charge subscription fees on a per-user basis and, to a lesser degree, non-user based single application licenses. We bill customers and collect payment for subscriptions to our platform in advance on an annual, quarterly, or monthly basis. In certain instances, our customers have paid their entire contract up front.

SaaS Subscriptions

We generate cloud-based subscription revenue primarily from the sales of subscriptions to access our cloud offering, together with related support services to our customers. We perform all required maintenance and support for our cloud offering, and we do not separately charge customers for hosting costs. Revenue is recognized on a ratable basis over the contract term beginning on the date the service is made available to the customer. Our cloud-based subscription contracts generally have a term of one to three years in length. We bill customers and collect payment for subscriptions to our platform in advance, and they are non-cancellable.

Term License Subscriptions

Our term license subscription revenue is derived from customers with on-premise installations of our platform pursuant to contracts that were historically one to three years in length. The majority of recent contracts have been one year in length. Although term license subscriptions are sold with maintenance and support, the software is fully functional at the beginning of the subscription and is considered a distinct performance obligation. On rare occasions, a cloud-based subscription may include the right for the customer to take possession of the license and as such, the revenue is treated as a license. Revenue from term license subscriptions is recognized when control of the software license has transferred to the customer, which is the later of delivery or commencement of the contract term.

Maintenance and Support

Maintenance and support subscriptions include both technical support and when-and-if-available software upgrades, which are treated as a single performance obligation as they are considered a series of distinct services that are substantially the same and have the same duration and measure of progress. Revenue from maintenance and support is recognized ratably over the contract period, which is the period over which the customer has continuous access to maintenance and support.

Professional Services

Our professional services revenue is comprised of fees for consulting services, including application development and deployment assistance as well as training services related to our platform. Our professional services are considered distinct performance obligations when sold stand alone or with other products.

Consulting Services

We sell consulting services to assist customers in planning and executing the deployment of our software. Customers are not required to use consulting services to fully benefit from the software. Consulting services are regularly sold on a standalone basis and either (1) under a fixed-fee arrangement or (2) on a time and materials basis. Consulting contracts are each considered separate performance obligations because they do not integrate with each other or with other products and services to deliver a combined output to the customer, do not modify or customize (or are not modified or customized by) each other or other products and services, and do not affect the customer's ability to use the other consulting offerings or other products and services. Revenue under consulting contracts is recognized over time as services are delivered. For time and materials-based consulting contracts, we have elected the practical expedient of recognizing revenue upon invoicing since the invoiced amount corresponds directly to the value of our service to-date.

Training Services

We sell various training services to our customers. Training services are sold in the form of prepaid training credits that are redeemed based on a fixed rate per course. Training revenue is recognized when the associated training services are delivered.

Significant Judgments and Estimates

Determining the Transaction Price

The transaction price includes both fixed and variable consideration. Variable consideration is included in the transaction price to the extent it is probable a significant reversal will not occur. The amount of variable consideration excluded from the transaction price for the six months ended June 30, 2020 was insignificant. Our estimates of variable consideration are also subject to subsequent true-up adjustments and may result in changes to transaction prices; however, such true-up adjustments are not expected to be material.

Allocating the Transaction Price Based on Standalone Selling Prices ("SSP")

We allocate the transaction price to each performance obligation in a contract based on its relative SSP. The SSP is the observable price at which we sell the product or service separately. In the absence of observable pricing, we estimate SSP using the residual approach. We establish SSP as follows:

1. SaaS subscriptions - Given the highly variable selling price of our SaaS subscriptions, we establish the SSP of our SaaS subscriptions using a residual approach after first determining the SSP of consulting and training services. We have concluded the residual approach to estimating SSP of our SaaS subscriptions is an appropriate allocation of the transaction price.

2. Term license subscriptions - Given the highly variable selling price of our term license subscriptions, we have established SSP of term license subscriptions using a residual approach after first determining the SSP of maintenance and support. Maintenance and support is sold on a standalone basis in conjunction with renewals of our legacy perpetual software licenses and within a narrow range of the net license fee. Because an economic relationship exists between the license and maintenance and support, we have concluded the residual approach to estimating SSP of term license subscriptions is an appropriate allocation of the transaction price.

3. Maintenance and support - We establish SSP of maintenance and support as a percentage of the stated net subscription fee based on observable pricing of maintenance and support renewals from our legacy perpetual software licenses.

4. Consulting services and training services - SSP of consulting services and training services is established based on the observable pricing of standalone sales within each geographic region where the services are sold.

Contract Balances

Timing may differ between the satisfaction of performance obligations and the invoicing and collection of amounts related to our contracts with customers. Contract assets primarily relate to unbilled amounts for contracts with customers for which the amount of revenue recognized exceeds the amount billed to the customer. Contract assets are transferred to accounts receivable when the right to invoice becomes unconditional. As of June 30, 2020 and December 31, 2019, contract assets of $20.8 million and $22.8 million, respectively, are included in the prepaid expenses and other current assets and other assets line items in our condensed consolidated balance sheets.

Contract liabilities consists of deferred revenue and include payments received in advance of the satisfaction of performance obligations. Deferred revenue is then recognized as the revenue recognition criteria are met. Deferred revenue that will be recognized during the succeeding 12-month period is recorded as current, and the remaining deferred revenue is recorded as non-current. For the six months ended June 30, 2020, we recognized $57.9 million of revenue that was included in the deferred revenue balance as of December 31, 2019.

Transaction Price Allocated to the Remaining Performance Obligations

As of June 30, 2020, we had an aggregate transaction price of $175.9 million allocated to unsatisfied performance obligations. We expect to recognize $160.7 million of this balance as revenue over the next 24 months with the remaining amount recognized thereafter.

4. Leases

At the inception of an arrangement, we determine whether the arrangement is or contains a lease based on the unique facts and circumstances present and the classification of the lease. Operating leases with a term greater than one year are recognized on the balance sheet as right-of-use ("ROU") assets, lease liabilities, and, if applicable, long-term lease liabilities. ROU assets represent our right to use an underlying asset for the lease term, and lease liabilities represent our obligation to make lease payments arising from the lease. We have elected not to recognize on the balance sheet leases with a term of one year or less.

For contracts with lease and non-lease components, we have elected not to allocate the contract consideration and to account for the lease and non-lease components as a single lease component. Finance leases are included in property and equipment, net, finance lease liabilities, current, and finance lease liabilities, net of current portion line items in our condensed consolidated balance sheets.

Lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The implicit rates within most of our leases are generally not determinable; therefore, we use the incremental borrowing rate at the lease commencement date to determine the present value of lease payments. The determination of our incremental borrowing rate requires judgment and is estimated for each lease based on the rate we would have to pay for a collateralized loan with the same term and payments as the lease. We consider various factors, including our level of collateralization, estimated credit rating, and the currency in which the lease is denominated. The operating lease ROU also includes any lease prepayments, offset by lease incentives. Certain of our leases include options to extend or terminate the lease. An option to extend the lease is considered in connection with determining the ROU asset and lease liability when it is reasonably certain we will exercise that option while an option to terminate is considered as well unless it is reasonably certain we will not exercise the option. For certain equipment leases, we apply a portfolio approach to effectively account for the operating lease ROU assets and liabilities.

Expense for operating leases is recognized on a straight-line basis over the lease term as an operating expense while the expense for finance leases is recognized as depreciation expense and interest expense. We have lease agreements which require payments for lease and non-lease components (i.e., common area maintenance) that are accounted for as a single lease component. Variable lease payment amounts that cannot be determined at the commencement of the lease, such as maintenance costs based on future obligations, are not included in ROU assets or lease liabilities but rather are expensed as incurred and recorded as variable lease expense.

We have operating and finance leases for corporate offices, office furniture and fixtures, and computer hardware. Our leases have remaining lease terms of 1 year to 12 years, some of which include options to extend the leases for up to 5 years.

In April 2018, we entered into a lease agreement with respect to 176,222 square feet of office space in McLean, Virginia for a new corporate headquarters. The initial term of the lease was 150 months. We took initial possession of the first phase of the new headquarters in October 2018 and began to recognize rent expense as of that date. In February 2019, we took possession of a further 28,805 square feet of adjacent office space.

In January 2020, we entered into an amendment which adjusts the original terms of the headquarters lease. Under this amendment, we exercised an option to expand occupancy, adding 34,158 square feet of space. Occupancy of the added space is to commence upon the earlier of the completion of certain improvements or October 14, 2020. Pursuant to the guidance of ASC 842, the amendment is considered a modification to the original lease and is accounted for as a separate contract because it represents a new right-of-use asset and the lease costs charged on the new space are at prevailing market rates. As of June 30, 2020, we have not taken possession of the space nor met the criteria for the lease to be considered commenced. Accordingly, we have not reported a right-of-use asset or liability on our condensed consolidated balance sheets nor have recorded expense on our condensed consolidated statements of operations in relation to the additional space.

The following table sets forth the components of lease expense for the three and six months ended June 30, 2020 (in thousands):

	Three Months Ended June 30, 2020	Six Months Ended June 30, 2020
Operating lease cost	$ 1,408	$ 3,276
Finance lease costs:		
Amortization of right-of-use assets	372	745
Interest on lease liabilities	46	97
Short-term lease cost	195	380
Variable lease cost	34	217
Total	$ 2,055	$ 4,715

Supplemental balance sheet information related to leases as of June 30, 2020 was as follows (in thousands, except for lease term and discount rate):

	As of June 30, 2020
Operating Leases	
Operating right-of-use assets	$ 23,156
Operating lease liabilities, current	$ 5,427
Operating lease liabilities, net of current portion	44,142
Total operating lease liabilities	$ 49,569
Finance Leases	
Property and equipment, at cost	$ 4,471
Accumulated depreciation	(1,445)
Property and equipment, net	$ 3,026
Finance lease liabilities, current	$ 1,549
Finance lease liabilities, net of current portion	1,556
Total finance lease liabilities	$ 3,105
Weighted Average Remaining Lease Term (in years)	
Operating leases	11.0
Finance leases	2.0
Weighted Average Discount Rate	
Operating leases	9.9 %
Finance leases	5.5 %

For the three and six months ended June 30, 2020, amortization of operating right-of-use assets totaled $0.2 million and $0.9 million, respectively. For the three and six months ended June 30, 2020, interest expense on operating right-of-use liabilities totaled $1.0 million and $1.4 million, respectively.

Supplemental cash flow information related to leases for the six months ended June 30, 2020 was as follows (in thousands):

	Six Months Ended June 30, 2020
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash outflows for operating leases	$ 1,044
Operating cash outflows for finance leases	97
Financing cash outflows for finance leases	716

A summary of our future minimum lease commitments under non-cancellable leases as of June 30, 2020 is as follows (in thousands):

	Operating Leases	Finance Leases
2020 (excluding the six months ended June 30, 2020)	$ 2,319	$ 810
2021	7,434	1,620
2022	8,060	859
2023	8,145	—
2024	8,526	—
2025	9,223	—
Thereafter	57,379	—
Total lease payments	101,086	3,289
Less: imputed interest	(51,517)	(184)
Total	$ 49,569	$ 3,105

5. Acquisitions

Novayre Solutions SL

In January 2020, we acquired 100% of the outstanding common stock of Novayre Solutions SL, a developer of a robotic process automation platform, for approximately $6.9 million. The acquisition was made due to the attractive nature of the product offerings of Novayre and in furtherance of our objective to enhance our automation platform. The transaction was financed through available cash on hand.

The allocation of the purchase price is preliminary pending the finalization of the fair value of the acquired net assets, liabilities assumed, deferred income taxes, and assumed income and non-income based tax liabilities. As of the acquisition date, the purchase price was assigned to the acquired assets and assumed liabilities as follows (in thousands):

Cash acquired	$ 731
Other current assets	213
Property and equipment	22
Developed technology	1,537
Customer relationships	406
Goodwill	4,348
Other noncurrent assets	10
Total assets acquired	7,267
Current liabilities	14
Noncurrent liabilities	344
Total liabilities assumed	358
Net assets acquired	$ 6,909

There were no changes to our reportable segments as a result of the acquisition, and revenue and expenses from the date of the acquisition through June 30, 2020 were immaterial. Additionally, acquisition costs incurred in relation to the transaction were immaterial.

Acquired property and equipment is depreciated on a straight-line basis over the assets' respective estimated remaining useful lives. Goodwill is calculated as the excess of the consideration transferred over the fair value of the identifiable net assets acquired and represents the future economic benefits expected to arise from other intangible assets acquired that do not qualify for separate recognition, including assembled workforce, non-contractual relationships, and expected future synergies. We do not expect the purchase price allocated to goodwill and intangible assets to be deductible for tax purposes.

6. Property and Equipment, net

Property and equipment, net consisted of the following as of June 30, 2020 and December 31, 2019 (in thousands):

	June 30, 2020	December 31, 2019
Leasehold improvements	$ 36,116	$ 37,130
Office furniture and fixtures	4,861	4,963
Computer hardware	3,618	3,365
Computer software	1,352	1,350
Equipment	48	72
	45,995	46,880
Less: accumulated depreciation	(8,558)	(7,326)
Property and equipment, net	$ 37,437	$ 39,554

Depreciation expense totaled $1.4 million and $2.8 million for the three and six months ended June 30, 2020, respectively. There were nominal disposals recorded during the three months ended June 30, 2020. During the six months ended June 30, 2020, we retired $1.3 million of leasehold improvements, $0.1 million of computer hardware, and $0.1 million of office furniture and fixtures and equipment. Nominal losses on disposal were recorded for the three and six months ended June 30, 2020.

Depreciation expense totaled $1.1 million and $1.9 million for the three and six months ended June 30, 2019, respectively. During the three and six months ended June 30, 2019, we retired $3.2 million of leasehold improvements and $0.8 million of office furniture and fixtures. During the three and six months ended June 30, 2019, we recorded a loss on disposal of $0.1 million.

At June 30, 2020, property and equipment included $4.5 million of assets acquired under finance lease arrangements. Accumulated depreciation related to these finance lease arrangements totaled $1.4 million at June 30, 2020. Amortization of assets acquired under finance leases is included in depreciation and amortization expense.

7. Accrued Expenses

Accrued expenses consisted of the following as of June 30, 2020 and December 31, 2019 (in thousands):

	June 30, 2020	December 31, 2019
Accrued hosting costs	$ 2,277	$ 1,865
Accrued contract labor costs	1,621	1,921
Accrued marketing and tradeshow expenses	647	365
Accrued audit and tax expenses	472	315
Accrued legal costs	309	422
Accrued reimbursable employee expenses	226	1,353
Accrued third party license fees	189	288
Other accrued expenses	1,566	959
Total	$ 7,307	$ 7,488

8. Debt

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 LIBOR or the prime rate plus an additional interest rate margin that is determined by the availability of the 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 1.00 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 June 30, 2020. As of June 30, 2020, we had no outstanding borrowings under this revolving line of credit, and we had outstanding letters of credit totaling $11.1 million in connection with securing our leased office space.

9. 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 before tax plus the tax effect of any significant or unusual items, discrete events, or changes in tax law. Our operating subsidiaries are exposed to statutory effective tax rates ranging from zero to approximately 32%. Fluctuations in the distribution of pre-tax income among our operating subsidiaries can lead to fluctuations of the effective tax rate in the condensed consolidated financial statements. For the three and six months ended June 30, 2020, the actual effective tax rates were (2.4)% and (0.3)%, respectively. For the three and six months ended June 30, 2019, the actual effective tax rates were (2.7)% and (1.6)%, respectively.

We assess uncertain tax positions in accordance with ASC 740-10, *Accounting for Uncertainties in Income Taxes*. As of June 30, 2020, our net unrecognized tax benefits totaled $1.6 million, which if recognized would result in no net effect on the effective tax rate due to a valuation allowance. 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 or settlements of tax audits is not material to our condensed consolidated financial statements.

We file income tax returns in the United States federal jurisdiction and in many states and foreign jurisdictions. The tax years 2016 through 2019 remain open to examination by the major taxing jurisdictions to which we are subject. We are not currently under examination by the Internal Revenue Service for any open tax years.

In response to the COVID-19 pandemic, the United States passed the Coronavirus Aid, Relief, and Economic Security ("CARES") Act in March 2020. The CARES Act includes various income and payroll tax measures. Pursuant to these measures, we have elected the option to defer the deposit and payment of our share of social security taxes that would otherwise be due between March 27, 2020 and December 31, 2020. Under the CARES Act, half of these deferred payments are due by the end of fiscal year 2021 while the other half are due by the end of fiscal year 2022.

At this time, beyond the above deferral, the CARES Act is not expected to materially impact our financial statements, but we continue to evaluate potential impacts.

10. Stock-Based Compensation

Equity Incentive Plans

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 initial public offering. 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 ("RSUs"), stock appreciation rights, performance-based stock awards, and other forms of equity compensation to employees, including officers, 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 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 June 30, 2020, there were 7,142,549 shares of Class A common stock reserved for issuance under the 2017 Plan, of which 4,545,733 were available to be issued.

Stock Options

We estimate the fair value of stock options containing only a service condition 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 our 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 are not expected to be paid in the near future, which is consistent with our history of not paying dividends.

In May 2019, our Board of Directors granted a stock option to purchase 700,000 shares of our Class A common stock to our Chief Executive Officer (the "2019 CEO Grant") under the 2017 Plan with an exercise price of $33.98 per share. The 2019 CEO Grant is eligible to vest based on the achievement of a stock price appreciation target of our Class A common stock. Specifically, the 2019 CEO Grant will vest when shares of our Class A common stock closes at or above $84.63 per share for a period equal to or greater than 90 calendar days or upon the occurrence of a change in control in which the value of our Class A common stock is equal to or greater than $84.63 per share within five years of the grant date. The fair value of the 2019 CEO Grant was determined using a Monte Carlo simulation. The fair value of the award at the grant date was $9.5 million and will be amortized over the derived service period of 2.6 years.

The following table summarizes the assumptions used to estimate the fair value of stock options granted during the three and six months ended June 30, 2020 and June 30, 2019:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Risk-free interest rate	*	2.1%	*	2.1%
Expected term (in years)	*	2.6	*	2.6
Expected volatility	*	55.0%	*	55.0%
Expected dividend yield	*	—%	*	—%

* Not applicable because no stock options were granted during the period

The following table summarizes the stock option activity for the six months ended June 30, 2020:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2020	4,458,611	$ 12.30	5.8	$ 115,501
Granted	—	—	—	—
Exercised	(376,967)	5.98	—	16,706
Expired	(1,020)	12.00	—	—
Canceled	(34,080)	11.19	—	—
Outstanding at June 30, 2020	4,046,544	$ 12.90	5.33	$ 155,170
Exercisable at June 30, 2020	2,733,704	$ 8.00	5.45	$ 118,244

There were no stock options granted during the six months ended June 30, 2020. The weighted average grant date fair value of stock options granted during the six months ended June 30, 2019 was $13.57 per share. The total fair value of stock options that vested during the six months ended June 30, 2020 and June 30, 2019 was $1.0 million and $1.5 million, respectively. As of June 30, 2020, the total compensation cost related to unvested stock options not yet recognized was $6.1 million, which will be recognized over a weighted average period of 1.5 years.

Restricted Stock Units

The following table summarizes RSU activity for the six months ended June 30, 2020:

	Number of Shares	Weighted Average Grant Date Fair Value
Non-vested and outstanding at January 1, 2020	1,022,835	$ 31.39
Granted	231,333	52.46
Vested	(59,598)	32.82
Canceled	(77,593)	32.24
Non-vested and outstanding at June 30, 2020	1,116,977	35.62

As of June 30, 2020, total unrecognized compensation cost related to unvested RSUs was approximately $33.6 million, which will be recognized over a weighted average period of 2.3 years.

In November 2018, our co-founders were granted 255,930 RSUs under the 2017 Plan at a fair value of $30.06 per share. The awards were approved by the Board of Directors. The value of these awards at the grant date was $7.7 million and was amortized over the vesting periods. The RSUs vested during the three months ended March 31, 2019.

The following table summarizes the components of our stock-based compensation expense by instrument type for the three and six months ended June 30, 2020 and June 30, 2019 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
RSUs	$ 2,475	$ 1,902	$ 4,774	$ 8,671
Stock options	1,047	695	2,131	1,059
Common stock awards to Board of Directors	92	92	185	184
Total stock-based compensation expense	$ 3,614	$ 2,689	$ 7,090	$ 9,914

Stock-based compensation expense for RSUs, 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 six months ended June 30, 2020 and June 30, 2019 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Cost of revenue				
Subscriptions	$ 229	$ 161	$ 442	$ 315
Professional services	317	244	529	2,218
Operating expenses				
Sales and marketing	657	814	1,410	3,195
Research and development	619	435	1,172	2,550
General and administrative	1,792	1,035	3,537	1,636
Total stock-based compensation expense	$ 3,614	$ 2,689	$ 7,090	$ 9,914

11. Stockholders' Equity

As of June 30, 2020, we had authorized 500,000,000 shares of Class A common stock and 100,000,000 shares of Class B common stock, each with a par value of $0.0001 per share, of which 37,558,379 shares of Class A common stock and 32,281,936 shares of Class B common stock were issued and outstanding. 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 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 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.

12. Basic and Diluted Loss per Common Share

The following potentially dilutive securities outstanding, prior to the use of the treasury stock method or the if-converted method, have been excluded from the computation of diluted weighted-average shares outstanding for the respective periods below because they would have been anti-dilutive:

	Three and Six Months Ended June 30,	
	2020	2019
Stock options	4,046,544	5,046,632
Non-vested restricted stock units	1,116,127	996,049

13. Commitments and Contingencies

Contractual Warranty and Indemnification Obligations

We provide limited product warranties. Historically, any payments made under these provisions have been immaterial. We also agree to standard indemnification provisions in the ordinary course of business. Pursuant to these provisions, we agree to indemnify, hold harmless, and reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally our customers, in connection with certain intellectual property infringement claims by any third party arising from the use of our products or services in accordance with the agreement. The term of our contractual indemnity provisions often survives termination or expiration of the applicable agreement. We carry insurance that covers certain third-party claims relating to our services and limits our exposure. We have never incurred costs to defend lawsuits or settle claims related to these indemnification provisions.

Letters of Credit

At June 30, 2020 and December 31, 2019, we had outstanding letters of credit totaling $11.1 million and $10.5 million, respectively, in connection with securing our leased office space. All letters of credit are secured by our borrowing arrangement as described in Note 8.

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 expected to have a material adverse impact on our condensed consolidated financial statements.

14. Segment and Geographic Information

The following table summarizes revenue by geography for the three and six months ended June 30, 2020 and June 30, 2019 (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Domestic	$ 42,191	$ 43,785	$ 94,646	$ 84,862
International	24,584	21,490	50,993	40,717
Total	$ 66,775	$ 65,275	$ 145,639	$ 125,579

With respect to geographic information, revenue is attributed to respective geographies based on the contracting address of the customer. Revenues from external customers attributed to the United Kingdom were 12.4% of our total revenue for each of the three and six months ended June 30, 2020. Revenues from external customers attributed to the United Kingdom were 12.8% and 11.9% of our total revenue for the three and six months ended June 30, 2019, respectively. There were no other individual foreign countries from which more than 10% of our total revenue was attributable for each of the three and six months ended June 30, 2020 and June 30, 2019. Substantially all of our long-lived assets were held in the United States as of June 30, 2020 and December 31, 2019.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with (1) our condensed consolidated financial statements and related notes appearing elsewhere in this Quarterly Report on Form 10-Q and (2) the audited consolidated financial statements and the related notes and management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2019 included in our Annual Report on Form 10-K, filed with the Securities and Exchange Commission, or SEC, on February 20, 2020.

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These statements are often identified by the use of words such as "anticipate," "believe," "continue," "could," "estimate," "expect," "intend," "may," "plan," "project," "will," "would," or the negative or plural of these words or similar expressions or variations, including statements regarding our future financial and operating performance, anticipated expansion of the usage of partners to perform professional services, the increase of our subscriptions revenue as a percentage of total revenue, the fluctuation of gross margin in the short term and improvement of gross margin over time, our future capital requirements, and uncertain negative impacts that COVID-19 may have on our business, financial condition, results of operations, and changes in overall level of spending and volatility in the global economy. Such forward-looking statements are subject to a number of risks, uncertainties, assumptions, and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by the forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified herein and those discussed in the section titled "Risk Factors," set forth in Part I, Item 1A of our Annual Report on Form 10-K filed with the SEC on February 20, 2020 and in our other filings with the SEC. You should not rely upon forward-looking statements as predictions of future events. Furthermore, such forward-looking statements speak only as of the date of this report. Except as required by law, we undertake no obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements.

Overview

We provide a low-code automation platform that accelerates the creation of high-impact business applications, enabling our customers to automate the most important aspects of their business. Global organizations use our applications to improve customer experience, achieve operational excellence, and simplify global risk management and compliance.

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 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 have generated the majority of our revenue from sales of subscriptions, which include (1) software as a service subscriptions bundled with maintenance and support and hosting services and (2) term license subscriptions bundled with maintenance and support. Our subscription fees are based primarily on the number of users who access and utilize the applications built on our platform or, alternatively, non-user based single application licenses. Our customer contract terms generally vary from one to 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 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 customers are able to build and deploy applications on our platform. We have several strategic partnerships, including with KPMG, PwC, Accenture, and Deloitte, for them to refer customers to us in order to purchase subscriptions 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 customers include financial services, life sciences, government, telecommunications, media, energy, manufacturing, and transportation organizations. Generally, our sales force targets its efforts on organizations with over 2,000 employees and $2 billion in annual revenue. Revenue from government agencies represented 19.0% and 16.8% of our total revenue in the three and six months ended June 30, 2020, respectively, as compared to 16.8% and 17.3% of our total revenue in the three and six months ended June 30, 2019, respectively. No single end-customer accounted for more than 10% of our total revenue in the three and six months ended June 30, 2020 or June 30, 2019.

Our platform supports multiple languages to facilitate collaboration and address challenges in multi-national organizations. We offer our platform globally. In the three and six months ended June 30, 2020, 36.8% and 35.0%, respectively, of our total revenue was generated from customers outside of the United States as compared to 32.9% and 32.4% in the three and six months ended June 30, 2019, respectively. As of June 30, 2020, we operated in 12 countries. We believe 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.

Basis of Reporting - ASC 606

We adopted ASC 606, the new revenue recognition guidance, on January 1, 2019 using the modified retrospective method. Under this method of adoption, we recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of accumulated deficit and applied the new standard only to contracts that were not completed prior to January 1, 2019.

Because we were an emerging growth company until December 31, 2019, the Jumpstart Our Business Startups Act allowed us to delay adoption of ASC 606 until such time it was made applicable to private companies. We elected to use this extended transition period, and accordingly, did not report revenues under ASC 606 in our Quarterly Reports on Form 10-Q during 2019. Refer to our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020, for a complete reconciliation of our revenues under the old and new guidance. Prior period amounts in this Form 10-Q have been recast as if we had reported under ASC 606 for the applicable periods.

Recent Developments

Public Offering

In June 2020, we completed an underwritten public offering of 2,500,000 shares of our Class A common stock, of which 1,931,206 shares of Class A common stock were sold by us and 568,794 shares of Class A common stock were sold by existing stockholders. The underwriter purchased the shares from us and the selling stockholders at a price of $56.50 per share. Our net proceeds from the offering were $107.9 million, after deducting underwriting discounts and commissions and offering expenses. We did not receive any of the proceeds from the sale of shares by the selling stockholders.

COVID-19

Beginning in late 2019 and continuing into the second quarter of 2020, the outbreak of the novel coronavirus disease, or COVID-19, has resulted in the declaration of a global pandemic and adversely affected economic activity across virtually all sectors and industries on a local, national, and global scale. The impact of COVID-19 on the economy and our business continues to be a fluid situation.

Operationally, we remain focused on supporting our customers, employees, and communities during this time. We have responded quickly to adopt a virtual corporate strategy consisting of enabling most of our employees to work productively from home while continuing to guard the health and safety of our teams, support our customers, and mitigate risk. We are focused on ensuring continuity for our customers. To the extent possible, we are conducting business as usual, with necessary or advisable modifications to employee travel, employee work locations, and marketing events.

Through June 30, 2020, we have not seen a meaningful adverse impact to our financial position, results of operations, and cash flows and liquidity as a result of COVID-19. While the verticals from which we have historically generated the majority of our revenue have been less impacted by COVID-19 to date, there may be impacts to our financial condition and results of operations in the third quarter of 2020 and beyond as a result of reduced demand for our products and services and longer sales cycles. The ultimate impact of COVID-19 on our business is not estimable at this time and will be largely dependent upon a number of factors outside of our control including the extent and duration of the outbreak as well as any mitigating actions which may be undertaken by global governments and the general public.

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. We incur significant customer acquisition costs, including expenses associated with hiring new sales representatives, who generally take more than one year to become productive given the length of our sales cycle, and marketing costs, all of which, with the exception of sales commissions, are expensed as incurred.

Key Factors Affecting Our Performance

The following are several key factors that affect 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 our revenue growth will be primarily driven by the pace of adoption and penetration of our platform. We offer a leading custom software automation 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.

- **Growth of Our Customer Base.** 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, life sciences, and government. In addition, we have established relationships with strategic partners who work with organizations undergoing digital transformations. 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. 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. We have also refocused some of our professional services personnel to become customer success managers. Their role is to ensure the customer realizes value from our platform and support the "land and expand" strategy versus delivering billable hours.

- **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 subscriptions revenue as a percentage of total revenue to increase. 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 the usage of partners expands, we expect the proportion of our total revenue from subscriptions to increase over time relative to professional services. For the three and six months ended June 30, 2020, 62.0% and 63.1% of our revenue, respectively, was derived from sales of subscriptions while the remaining 38.0% and 36.9%, respectively, was derived from the sale of professional services. For the three and six months ended June 30, 2019, 56.5% and 56.9% of our revenue, respectively, was derived from sales of subscriptions while the remaining 43.5% and 43.1%, respectively, was derived from the sale of professional services.

- **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. In addition, we continue to pursue strategic acquisitions that enhance our product offerings as evidenced by our recent acquisition of Novayre. We also intend to continue to invest in sales and marketing as we further expand our sales teams, increase our marketing activities, and grow our international operations.

Key Metrics

We monitor the following metrics to help us measure and evaluate the effectiveness of our operations. All dollar amounts are presented in thousands.

Cloud Subscription Revenue

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Cloud subscription revenue	$ 29,580	$ 22,796	$ 57,970	$ 44,074

Cloud subscription revenue includes SaaS subscriptions bundled with maintenance and support and hosting services. As we generally sell our SaaS subscriptions on a per-user basis, our cloud 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 increasing cloud 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.

Cloud Subscription Revenue Retention Rate

	As of June 30,	
	2020	2019
Cloud subscription revenue retention rate	113 %	122 %

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 cloud subscription revenue retention rate for a particular trailing 12-month period, we first establish the recurring cloud subscription revenue for the previous trailing 12-month period. This effectively represents recurring dollars 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 cloud subscription revenue in the current trailing 12-month period from the cohort of customers from the previous trailing 12-month period. Cloud subscription revenue retention rate is then calculated by dividing the aggregate recurring cloud 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 cloud subscription revenue retention rate can fluctuate from period to period due to large customer contracts in any given period. The cloud subscription revenue retention rate as of June 30, 2019 was elevated as we continued to focus on converting customers with on-premises term license subscriptions to cloud subscriptions.

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 and, to a lesser degree, non-user based single application licenses. 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

Subscriptions 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.

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 generally offered as a term license. When our platform is delivered as a SaaS subscription, we handle its operational needs in third-party hosted data centers.

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 professional services revenue as percentage of total revenue to decrease. Additionally, if there is a decline in our procurement of new customers as a result of the COVID-19 pandemic, we may also see a similar decline in professional services revenue.

We have several strategic partnerships, including with KPMG, PwC, Accenture, and Deloitte. 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 generally perform professional services with respect to any new service contracts they originate, increasing our subscriptions 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

Cost of subscriptions 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 as well as the costs of billable expenses such as travel and lodging. 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 subscriptions 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 Gross Margin. Subscriptions gross margin is primarily affected by the growth in our subscriptions revenue as compared to the growth in, and timing of, costs to support such revenue. We expect to continue to invest in customer support and SaaS operations to support 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.

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 impacted by the amount of services performed by subcontractors as opposed to internal resources. Our professional services gross margin is also impacted by the amount of services performed by partners as opposed to internal resources.

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. In general, our operating expenses are expected to continue to increase as we invest resources in growing our various teams. However, our hiring activity in the near term will likely be lower in comparison to prior periods as a result of cost controlling measures we are implementing in response to the ongoing COVID-19 pandemic.

Sales and Marketing Expense

Sales and marketing expense primarily includes personnel costs, including salaries, bonuses, commissions, stock-based compensation, 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 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, stock-based compensation, 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, stock-based compensation, 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.

We expect our general and administrative expense to increase in absolute dollars as we continue to support our growth.

Other (Income) Expense

Other (Income) Expense, Net

Other (income) expense, net consists primarily of unrealized and realized gains and losses related to changes in foreign currency exchange rates, interest income on our cash and cash equivalents, and gains or losses on the disposal of property and equipment.

Interest Expense

Interest expense consists primarily of interest on our finance leases and debt, unused credit facility fees, and commitment fees on our letters of credit.

Results of Operations

The following table sets forth our consolidated statement of operations data (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Revenue				
Subscriptions	$ 41,418	$ 36,860	$ 91,854	$ 71,417
Professional services	25,357	28,415	53,785	54,162
Total revenue	66,775	65,275	145,639	125,579
Cost of revenue				
Subscriptions[1]	4,701	4,036	10,084	7,621
Professional services[1]	16,455	19,015	35,191	39,496
Total cost of revenue	21,156	23,051	45,275	47,117
Gross profit	45,619	42,224	100,364	78,462
Operating expenses				
Sales and marketing[1]	29,086	29,992	63,258	58,583
Research and development[1]	17,178	12,765	33,216	26,721
General and administrative[1]	11,450	9,261	24,591	18,277
Total operating expenses	57,714	52,018	121,065	103,581
Operating loss	(12,095)	(9,794)	(20,701)	(25,119)
Other (income) expense				
Other (income) expense, net	(682)	(79)	2,432	(381)
Interest expense	128	69	271	140
Total other (income) expense	(554)	(10)	2,703	(241)
Loss before income taxes	(11,541)	(9,784)	(23,404)	(24,878)
Income tax expense	274	267	80	389
Net loss	$ (11,815)	$ (10,051)	$ (23,484)	$ (25,267)

[1] Stock-based compensation as a component of these line items is as follows:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Cost of revenue				
Subscriptions	$ 229	$ 161	$ 442	$ 315
Professional services	317	244	529	2,218
Operating expenses				
Sales and marketing	657	814	1,410	3,195
Research and development	619	435	1,172	2,550
General and administrative	1,792	1,035	3,537	1,636
Total stock-based compensation expense	$ 3,614	$ 2,689	$ 7,090	$ 9,914

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Revenue				
Subscriptions	62.0 %	56.5 %	63.1 %	56.9 %
Professional services	38.0	43.5	36.9	43.1
Total revenue	100.0	100.0	100.0	100.0
Cost of revenue				
Subscriptions	7.0	6.2	6.9	6.1
Professional services	24.6	29.1	24.2	31.5
Total cost of revenue	31.7	35.3	31.1	37.5
Gross profit	68.3	64.7	68.9	62.5
Operating expenses				
Sales and marketing	43.6	45.9	43.4	46.7
Research and development	25.7	19.6	22.8	21.3
General and administrative	17.1	14.2	16.9	14.6
Total operating expenses	86.4	79.7	83.1	82.5
Operating loss	(18.1)	(15.0)	(14.2)	(20.0)
Other (income) expense				
Other (income) expense, net	(1.0)	(0.1)	1.7	(0.3)
Interest expense	0.2	0.1	0.2	0.1
Total other (income) expense	(0.8)	—	1.9	(0.2)
Loss before income taxes	(17.3)	(15.0)	(16.1)	(19.8)
Income tax expense	0.4	0.4	0.1	0.3
Net loss	(17.7) %	(15.4) %	(16.1) %	(20.1) %

Comparison of the Three Months Ended June 30, 2020 and 2019

Revenue

	Three Months Ended June 30,		% Change
	2020	2019	
	(dollars in thousands)		
Revenue			
Subscriptions	$ 41,418	$ 36,860	12.4 %
Professional services	25,357	28,415	(10.8) %
Total revenue	$ 66,775	$ 65,275	2.3 %

Total revenue increased $1.5 million, or 2.3%, in the three months ended June 30, 2020 compared to the same period in 2019 due to an increase in our subscriptions revenue of $4.6 million, partially offset by a decrease in our professional services revenue of $3.1 million. The increase in subscriptions revenue was driven largely by a $6.8 million increase in cloud subscription revenue, which was partially offset by a $2.7 million decline in on-premise software revenue. With respect to new versus existing customers, there was a $4.7 million increase in subscriptions revenue resulting from the sales of subscriptions to new customers which was offset by a reduction in expanded deployments for existing on-premise software customers. The decrease in professional services revenue was due to a $9.0 million decrease in revenue from existing customers which was partially offset by a $5.9 million increase in sales to new customers.

Cost of Revenue

	Three Months Ended June 30,		
	2020	2019	% Change
	(dollars in thousands)		
Cost of revenue			
Subscriptions	$ 4,701	$ 4,036	16.5 %
Professional services	16,455	19,015	(13.5)%
Total cost of revenue	$ 21,156	$ 23,051	(8.2)%
Subscriptions gross margin	88.6 %	89.1 %	
Professional services gross margin	35.1 %	33.1 %	
Total gross margin	68.3 %	64.7 %	

Cost of revenue decreased $1.9 million, or 8.2%, in the three months ended June 30, 2020 compared to the same period in 2019, primarily due to a $2.8 million decrease in contractor costs coupled with a $1.4 million decrease in billable expenses and a $0.3 million decrease in facility and overhead costs. These decreases were partially offset by a $2.0 million increase in professional services and product support personnel costs and a $0.6 million increase in other cost of revenue. Contractor costs decreased in the three months ended June 30, 2020 compared to the same period in 2019 because of a decrease in the usage of subcontractors for professional services engagements. Billable expenses decreased primarily due to lower travel and entertainment related expenses as a result of our shift to largely remote work while the decrease in facility and overhead costs was due largely to a reduction in rent expense. Personnel costs increased due to an increase in professional services and product support staff personnel headcount of 18.2% from June 30, 2019 to June 30, 2020. The increase in other cost of revenue was due to increased hosting costs as sales of our cloud offering increased in the three months ended June 30, 2020.

Subscriptions gross margin decreased to 88.6% for the three months ended June 30, 2020 compared to 89.1% in the same period in 2019 due to increased hosting costs during the three months ended June 30, 2020 as sales of our cloud offering increased and became a larger proportion of our overall subscription revenue. Professional services gross margin increased to 35.1% for the three months ended June 30, 2020 compared to 33.1% in the same period in 2019 due to a decrease in the usage of subcontractors for professional services engagements, a decrease in travel and entertainment related expenses, and a decrease in rent expenses. Due to the higher percentage of subscriptions revenue for the comparable periods and the aforementioned declines in professional services expenses, gross margin rose to 68.3% in the three months ended June 30, 2020 as compared to 64.7% in the same period in 2019.

Sales and Marketing Expense

	Three Months Ended June 30,		
	2020	2019	% Change
	(dollars in thousands)		
Sales and marketing	$ 29,086	$ 29,992	(3.0)%
% of revenue	43.6 %	45.9 %	

Sales and marketing expense decreased $0.9 million, or 3.0%, in the three months ended June 30, 2020 compared to the same period in 2019, primarily due to a $3.7 million decrease in marketing costs and a $2.8 million decrease in facility and overhead costs, which were partially offset by a $5.0 million increase in sales and marketing personnel costs and a $0.6 million increase in professional fees. Marketing costs decreased largely due to reduced costs incurred as a result of moving our annual user conference Appian World to virtual-only as well as a reduction in the number of in-person marketing events. Facility and overhead costs decreased due to lower travel and entertainment related expenses as a result of our shift to largely remote work. Personnel costs increased due to an increase in sales and marketing personnel headcount of 9.8% from June 30, 2019 to June 30, 2020 and increased sales commissions driven by our subscriptions revenue growth. Professional fees increased due to an increase in consulting fees and contract labor to support our growth.

Research and Development Expense

	Three Months Ended June 30,		
	2020	2019	% Change
	(dollars in thousands)		
Research and development	$ 17,178	$ 12,765	34.6 %
% of revenue	25.7 %	19.6 %	

Research and development expense increased $4.4 million, or 34.6%, in the three months ended June 30, 2020 compared to the same period in 2019, primarily due to a $4.7 million increase in research and development personnel costs, partially offset by a $0.2 million decrease in facility and overhead costs. Personnel costs increased due to an increase in research and development personnel headcount by 30.0% from June 30, 2019 to June 30, 2020. Facility and overhead costs decreased due to lower travel and entertainment related expenses as a result of our shift to largely remote work.

General and Administrative Expense

	Three Months Ended June 30,		
	2020	2019	% Change
	(dollars in thousands)		
General and administrative expense	$ 11,450	$ 9,261	23.6 %
% of revenue	17.1 %	14.2 %	

General and administrative expense increased $2.2 million, or 23.6%, in the three months ended June 30, 2020 compared to the same period in 2019 due to a $1.9 million increase in general and administrative personnel costs and a $0.3 million increase in professional fees, which was partially offset by a $0.1 million decrease in facility and overhead costs. Personnel costs increased due to an increase in general and administrative personnel headcount by 30.3% from June 30, 2019 to June 30, 2020, coupled with a $0.8 million increase in stock-based compensation expense which was primarily attributable to a stock option to purchase 700,000 shares of our Class A common stock granted to our Chief Executive Officer in May 2019. Professional fees increased due to the use of consulting services to support our back-office initiatives. Facility and overhead costs decreased primarily due to lower travel and entertainment related expenses as a result of our shift to largely remote work.

Other Income, Net

	Three Months Ended June 30,		
	2020	2019	% Change
	(dollars in thousands)		
Other income, net	$ (682)	$ (79)	***
% of revenue	(1.0)%	(0.1)%	

*** - Indicates a percentage that is not meaningful

Other income, net increased by $0.6 million in the three months ended June 30, 2020 compared to the same period in 2019, primarily due to $0.6 million in foreign exchange gains in the three months ended June 30, 2020 compared to nominal foreign exchange losses in the three months ended June 30, 2019. The increase in foreign exchange gains was primarily due to currency fluctuations of the British Pound Sterling, Euro, Singapore dollar, and Swiss franc versus the U.S. dollar during the three months ended June 30, 2020 compared to the same period in 2019.

Interest Expense

	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	% Change
	(dollars in thousands)		
Interest expense	$ 128	$ 69	85.5%
% of revenue	0.2 %	0.1 %	

Interest expense increased by $0.1 million, or 85.5%, in the three months ended June 30, 2020 compared to the same period in 2019, primarily due to commitment fees on the letter of credit outstanding.

Comparison of the Six Months Ended June 30, 2020 and 2019

Revenue

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	% Change
	(dollars in thousands)		
Revenue			
Subscriptions	$ 91,854	$ 71,417	28.6 %
Professional services	53,785	54,162	(0.7)%
Total revenue	$ 145,639	$ 125,579	16.0 %

Total revenue increased $20.1 million, or 16.0%, in the six months ended June 30, 2020 compared to the same period in 2019 due to an increase in our subscriptions revenue of $20.4 million which was partially offset by a decrease in our professional services revenue of $0.4 million. Of the increase in subscriptions revenue, $13.9 million, or 68.0%, was attributable to cloud subscription revenue while $5.5 million, or 27.0%, was attributable to on-premise software revenue. With respect to new versus existing customers, $13.4 million of the increase in revenue stemmed from expanded deployments and corresponding sales of additional subscriptions to existing customers while the remaining increase of $7.0 million was the result of sales of subscriptions to new customers, $2.8 million of which related to a three year on-premise contract which closed in the first quarter of 2020. The decrease in professional services revenue was due to a $10.5 million decrease in revenue from existing customers which was substantially offset by $10.1 million in sales to new customers.

Cost of Revenue

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	% Change
	(dollars in thousands)		
Cost of revenue			
Subscriptions	$ 10,084	$ 7,621	32.3 %
Professional services	35,191	39,496	(10.9)%
Total cost of revenue	$ 45,275	$ 47,117	(3.9)%
Subscriptions gross margin	89.0 %	89.3 %	
Professional services gross margin	34.6 %	27.1 %	
Total gross margin	68.9 %	62.5 %	

Cost of revenue decreased $1.8 million, or 3.9%, in the six months ended June 30, 2020 compared to the same period in 2019, primarily due to a $4.8 million decrease in contractor costs, a $1.4 million decrease in billable expenses, and a $0.1 million decrease in facility and overhead costs. These decreases were largely offset by a $2.9 million increase in professional services and product support personnel costs and a $1.6 million increase in other cost of revenue. Contractor costs decreased in the six months ended June 30, 2020 compared to the same period in 2019 because of a decrease in the usage of subcontractors for professional service engagements. Billable expenses decreased primarily due to lower travel and entertainment related expenses as a result of our shift to largely remote work while the decrease in facility and overhead costs was due largely to a reduction in rent expense. Personnel costs increased due to an increase in professional services and product support staff personnel headcount of 18.2% from June 30, 2019 to June 30, 2020. The increase in other cost of revenue was due to increased hosting costs as sales of our cloud offering increased in the six months ended June 30, 2020.

Subscriptions gross margin was 89.0% for the six months ended June 30, 2020 compared to 89.3% in the same period in 2019 due to increased hosting costs during the six months ended June 30, 2020 as sales of our cloud offering increased and became a larger proportion of our overall subscription revenue. Professional services gross margin was 34.6% for the six months ended June 30, 2020 compared to 27.1% in the same period in 2019 due to a decrease in the usage of subcontractors for professional services engagements, a decrease in travel and entertainment related expenses, a decrease in rent expenses, a $1.6 million decrease in stock-based compensation expense due to the vesting of restricted stock units granted to three of our co-founders during the six months ended June 30, 2019, and the timing of certain contracts which were delivered in 2019 but for which revenue was recognized in 2020. Due to the higher percentage of subscriptions revenue for the comparable periods as well as the aforementioned declines in professional services expenses, gross margin was 68.9% in the six months ended June 30, 2020 as compared to 62.5% in the same period in 2019.

Sales and Marketing Expense

	Six Months Ended June 30,		
	2020	**2019**	**% Change**
	(dollars in thousands)		
Sales and marketing	$ 63,258	$ 58,583	8.0 %
% of revenue	43.4 %	46.7 %	

Sales and marketing expense increased $4.7 million, or 8.0%, in the six months ended June 30, 2020 compared to the same period in 2019, primarily due to an $8.0 million increase in sales and marketing personnel costs and a $1.0 million increase in professional fees, which were partially offset by a $2.4 million decrease in facility and overhead costs and a $1.9 million decrease in marketing costs. Personnel costs increased due to an increase in sales and marketing personnel headcount by 9.8% from June 30, 2019 to June 30, 2020 and increased sales commissions driven by our subscriptions revenue growth, partially offset by a $1.8 million decrease in stock-based compensation expense. Professional fees increased due to an increase in consulting fees and contract labor to support our growth. Facility and overhead costs decreased due to lower travel and entertainment related expenses as a result of our shift to largely remote work. Marketing costs decreased due to reduced costs incurred as a result of moving our annual user conference Appian World to virtual-only as well as a reduction in the number of in-person marketing events.

Research and Development Expense

	Six Months Ended June 30,		
	2020	**2019**	**% Change**
	(dollars in thousands)		
Research and development	$ 33,216	$ 26,721	24.3 %
% of revenue	22.8 %	21.3 %	

Research and development expense increased $6.5 million, or 24.3%, in the six months ended June 30, 2020 compared to the same period in 2019, primarily due to a $6.6 million increase in research and development personnel costs, partially offset by a $0.1 million decrease in professional fees. Personnel costs increased due to an increase in research and development personnel headcount by 30.0% from June 30, 2019 to June 30, 2020, partially offset by a $1.4 million decrease in stock-based compensation expense. Professional fees decreased due to a decrease in consulting fees to support the development and enhancement of our platform.

General and Administrative Expense

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	% Change
	(dollars in thousands)		
General and administrative expense	$ 24,591	$ 18,277	34.5 %
% of revenue	16.9 %	14.6 %	

General and administrative expense increased $6.3 million, or 34.5%, in the six months ended June 30, 2020 compared to the same period in 2019 due to a $4.3 million increase in general and administrative personnel costs, a $1.4 million increase in professional fees, and a $0.6 million increase in facility and overhead costs. Personnel costs increased due to an increase in general and administrative personnel headcount by 30.3% from June 30, 2019 to June 30, 2020 coupled with a $1.9 million increase in stock-based compensation expense during the six months ended June 30, 2020 which was primarily attributable to a stock option to purchase 700,000 shares of our Class A common stock granted to our Chief Executive Officer in May 2019. Professional fees increased due to the use of consulting services to support our back-office initiatives. Facility and overhead costs increased to support our personnel growth.

Other Expense (Income), Net

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	% Change
	(dollars in thousands)		
Other expense (income), net	$ 2,432	$ (381)	***
% of revenue	1.7 %	(0.3) %	

*** - Indicates a percentage that is not meaningful

Other expense (income), net increased by $2.8 million in the six months ended June 30, 2020 compared to the same period in 2019, primarily due to $2.9 million in foreign exchange losses in the six months ended June 30, 2020 compared to $0.1 million in foreign exchange losses in the six months ended June 30, 2019. The increase in foreign exchange losses was primarily due to currency fluctuations of the British pound sterling, Euro, Australian dollar, Singapore dollar, and Swedish krona versus the U.S. dollar during the six months ended June 30, 2020 compared to the same period in 2019.

Interest Expense

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019	% Change
	(dollars in thousands)		
Interest expense	$ 271	$ 140	93.6%
% of revenue	0.2 %	0.1 %	

Interest expense increased by $0.1 million, or 93.6%, in the six months ended June 30, 2020 compared to the same period in 2019, primarily due to commitment fees on the letter of credit outstanding.

Liquidity and Capital Resources

As of June 30, 2020, we had $256.1 million of cash and cash equivalents.

In June 2020, we completed an underwritten public offering of 2,500,000 shares of our Class A common stock, of which 1,931,206 shares of Class A common stock were sold by us and 568,794 shares of Class A common stock were sold by existing stockholders. The underwriter purchased the shares from us and the selling stockholders at a price of $56.50 per share. Our net proceeds from the offering were $107.9 million, after deducting underwriting discounts and commissions and offering expenses. We did not receive any of the proceeds from the sale of shares by the selling stockholders.

We believe our existing cash and cash equivalents, together with any positive cash flows from operations and available borrowings under our line of credit, will be sufficient to support working capital and capital expenditure requirements for at least the next 12 months. 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 expansion of sales and marketing activities, particularly internationally, the introduction of new and enhanced products and functions as well as platform enhancements and professional services offerings, the level of market acceptance of our applications, spending we may incur on our new headquarters, and the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic and its impact on our business. In the event additional financing is required from outside sources, we may be unable to raise the funds on acceptable terms, if at all. 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 recently have raised and may continue to 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. We recently have, and in the future may continue to, invest or acquire stakes in complementary businesses, products, or technologies, which could also require us to seek additional equity financing, incur indebtedness, or use cash resources. We have no present binding agreements or commitments to enter into any such acquisitions. If we are unable to raise additional capital when desired, our business, operating results, and financial condition could be adversely affected.

The following table shows a summary of our cash flows for the six months ended June 30, 2020 and 2019 (in thousands):

	Six Months Ended June 30,	
	2020	**2019**
Cash (used in) provided by operating activities	$ (6,957)	$ 12,007
Cash used in investing activities	(6,824)	(27,689)
Cash provided by financing activities	109,768	1,987

Sources of Funds

We have financed our operations in large part with equity and debt financing arrangements, including net proceeds of $77.8 million from our initial public offering in May 2017, net proceeds of $57.8 million from our underwritten public offering in August 2018, net proceeds of $101.3 million from our underwritten public offering in September 2019, and net proceeds of $107.9 million from our underwritten public offering in June 2020. In addition, we have financed our operations through sales of subscriptions and professional services and borrowings under our credit facilities. We also financed $3.7 million of office furniture and fixtures and $0.8 million of equipment, both associated with the build out of our new headquarters.

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 (1) an adjusted quick ratio of at least 1.35 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 June 30, 2020. As of June 30, 2020, we had not made any borrowings under this revolving line of credit, and we had outstanding letters of credit totaling $11.1 million in connection with securing our leased office space.

Use of Funds

Our principal uses of cash are funding operations and other working capital requirements. More recently, we have utilized cash to pay for the acquisition of an entity we believe is complementary to our business. 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 uses of cash in 2020 to date have included the acquisition of Novayre and modest capital expenditures while cash uses in 2019 included the build out of our new headquarters, which included spend approximately $21.0 million above the $18.4 million tenant improvement allowance provided by the landlord for the build out, of which $17.0 million related to office furniture and fixtures and computer hardware that has been financed. For the six months ended June 30, 2020, substantially all of the $6.8 million of cash used in investing activities was related to the acquisition of Novayre.

Historical Cash Flows

Operating Activities

For the six months ended June 30, 2020, net cash used in operating activities of $7.0 million consisted of a net loss of $23.4 million, offset by $10.1 million in adjustments for non-cash items and $6.4 million of cash provided by changes in working capital. Adjustments for non-cash items consisted of stock-based compensation of $7.1 million, depreciation and amortization expense of $3.0 million, and bad debt expense of $0.2 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of a $2.6 million increase in accrued compensation and related benefits as a result of higher employee benefit accruals such as vacation and bonuses, a $2.4 million increase in operating lease liabilities, a $2.3 million increase in deferred revenue as a result of increased subscription sales, a $1.9 million decrease in prepaid expenses and other assets, and a $1.3 million increase in other liabilities due to the deferral of social security tax payments pursuant to the provisions of the CARES Act. These increases to working capital were partially offset by a $2.1 million increase in accounts receivable stemming from decreased cash collections during the six months ended June 30, 2020, a $1.7 million decrease in accounts payable and accrued expenses primarily due to the timing of payments, and a $0.3 million increase in deferred commissions.

For the six months ended June 30, 2019, net cash provided by operating activities of $12.0 million consisted of a net loss of $25.3 million, offset by $12.0 million in adjustments for non-cash items and $25.2 million of cash provided by changes in working capital. Adjustments for non-cash items consisted of stock-based compensation of $9.9 million, depreciation and amortization expense of $1.9 million, a loss on disposal of equipment of $0.1 million, and bad debt expense of $0.1 million. The increase in cash and cash equivalents resulting from changes in working capital primarily consisted of a $13.5 million decrease in prepaid expenses and other assets, primarily due to a decrease in the non-trade receivable resulting from our tenant improvement allowance. In accordance with accounting principles generally accepted in the United States of America, or U.S. GAAP, the $17.0 million of tenant improvement allowance reimbursements received during the six months ended June 30, 2019 are a source of cash in operating activities, whereas the capital expenditures are recorded as cash used in investing activities. There was also a $9.3 million decrease in accounts receivable due to increased cash collections during the six months ended June 30, 2019 and a $5.5 million increase in accounts payable and accrued expenses primarily due to the timing of payments. There was also a $4.6 million increase in deferred rent, non-current as a result of taking initial possession of the second phase of our new headquarters in February 2019 and recording an additional lease incentive obligation. There was also a $0.6 million increase in deferred revenue as a result of increased subscription sales. These increases were partially offset by a $3.2 million decrease in accrued compensation and related benefits primarily due to a decrease in accrued vacation expense because of our new paid-time off policy, which took effect on January 1, 2019. There was also a $4.8 million increase in deferred commissions due to increased sales during the six months ended June 30, 2019 and a $0.3 million decrease in other current liabilities.

Investing Activities

For the six months ended June 30, 2020, net cash used in investing activities was $6.8 million which was primarily the result of $6.1 million in payments, net of cash acquired, related to the acquisition of Novayre. In addition, there were approximately $0.7 million in purchases of property and equipment.

For the six months ended June 30, 2019, net cash used in investing activities was $27.7 million and related primarily to the build-out of our new headquarters and the purchase of property and equipment.

Financing Activities

For the six months ended June 30, 2020, net cash provided by financing activities was $109.8 million, consisting of $108.2 million in proceeds from our underwritten public offering in June 2020, net of underwriting discounts and commissions and the payment of offering expenses and $2.2 million in proceeds received from stock option exercises, partially offset by $0.7 million in principal payments on finance leases.

For the six months ended June 30, 2019, net cash provided by financing activities was $2.0 million, consisting of proceeds received from stock option exercises.

Contractual Obligations and Commitments

We entered into a Second Amendment to Deed of Lease, or the Lease Second Amendment, with Tamares 7950 Owner LLC, or the Landlord, effective as of January 1, 2020. The Lease Second Amendment modified the Deed of Lease dated as of April 17, 2018, as amended on December 23, 2019, between us and Landlord, or the Lease, for our headquarters in McLean, Virginia. Under the Lease Second Amendment, we exercised an option to expand the lease to the fourth floor of the North Tower, or the Fourth Floor, adding approximately 34,158 square feet to the premises. We will commence occupancy of the Fourth Floor on the sooner of the completion of certain improvements to the Fourth Floor and October 14, 2020. The monthly base rent for the Fourth Floor will be $87,388 for the first 27 months of the lease term, subject to periodic increases thereafter.

Other than as described above, as of June 30, 2020, there was no material change in our contractual obligations and commitments from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020.

Off-Balance Sheet Arrangements

As of June 30, 2020, 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 we are not materially exposed to any financing, liquidity, market, or credit risks that could arise if we had engaged in these relationships.

Critical Accounting Policies and 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 those financial statements and accompanying notes. Although we believe 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 and judgments embedded in the consolidated financial statements for the periods presented include revenue recognition, stock-based compensation, the valuation of goodwill and intangible assets, leases, costs to obtain a contract with a customer, and income taxes.

While we continue to monitor the developments surrounding the COVID-19 pandemic, we are not aware of any specific events or circumstances that would require us to update our estimates, assumptions, and judgments.

There have been no material changes in our critical accounting policies from those disclosed in our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020.

Recent Accounting Pronouncements

See Note 2 to the unaudited condensed consolidated financial statements in Part I, Item 1 of this Quarterly Report on Form 10-Q for a discussion of recent accounting pronouncements.

Item 3. QUANTITATIVE AND QUALITATIVE 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. The uncertainty that exists with respect to the economic impact of the global COVID-19 pandemic has also introduced significant volatility in the financial markets.

Interest Rate Risk

We had cash and cash equivalents of $256.1 million as of June 30, 2020, 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.

At June 30, 2020, we had no outstanding borrowings.

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, Singapore dollar, Swedish krona, 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 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.

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 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.

Item 4. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Exchange Act that are designed to ensure information required to be disclosed by a company in the reports it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure information required to be disclosed by a company in the reports it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2020. Based on the evaluation of our disclosure controls and procedures as of June 30, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the period covered by this Quarterly Report on Form 10-Q that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance the objectives of the control system are met. Further, the design of a control system must reflect the fact there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II—OTHER INFORMATION

Item 1. 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 resources, and other factors.

Item 1A. RISK FACTORS

Our business is subject to risks and events that, if they occur, could adversely affect our financial condition and results of operations and the trading price of our securities. In addition to the other information set forth in this Quarterly Report on Form 10-Q, you should carefully consider the factors described in "Part I, Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020.

Other than as set forth below, there have been no material changes from the risk factors described in "Part I, Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019:

The effects of national and global epidemics, including the recent COVID-19 pandemic, could have an adverse impact on our business, operations, and the markets and communities in which we operate.

In March 2020, the World Health Organization declared the outbreak of COVID-19 a pandemic. Our business and operations could be adversely affected by national and global epidemics, including the recent COVID-19 pandemic, impacting the markets and communities in which we operate.

In response to the COVID-19 pandemic, many state, local, and foreign governments have put in place, and others in the future may put in place, quarantines, executive orders, shelter-in-place orders, and similar government orders and restrictions in order to control the spread of the disease. Such orders or restrictions, or the perception that such orders or restrictions could occur, have resulted in business closures, work stoppages, slowdowns and delays, work-from-home policies, and travel restrictions, among other effects that could negatively impact productivity and disrupt our operations. For example, we have implemented a work-from-home policy for employees, and we may take further actions that alter our operations as may be required by federal, state, or local authorities or which we determine are in the best interests of our employees and stockholders.

In addition, while the potential impact and duration of the COVID-19 pandemic on the global economy and our business in particular may be difficult to assess or predict, the pandemic has resulted in, and may continue to result in, significant disruption of global financial markets, reducing our ability to access capital, which could in the future negatively affect our liquidity. The COVID-19 pandemic also could reduce the demand for our customers’ products and services, which could negatively impact our customers’ willingness to renew or enter into contracts with us or our ability to collect accounts receivable on a timely basis, which, if significant, could materially and adversely affect our business, results of operations, and financial condition.

The global pandemic of COVID-19 continues to rapidly evolve, and we will continue to monitor the COVID-19 situation closely. The ultimate impact of the COVID-19 pandemic or a similar health epidemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, operations, or the global economy as a whole, which makes our future results difficult to predict.

In addition, to the extent the ongoing COVID-19 pandemic adversely affects our business and results of operations, it may also have the effect of heightening many of the other risks and uncertainties described in “Part I, Item 1A. Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 20, 2020.

Unfavorable conditions in the global economy or the vertical markets we serve could limit our ability to grow our business and negatively affect our operating results.

General worldwide economic conditions have experienced significant instability due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic. These conditions make it extremely difficult for customers and us to accurately forecast and plan future business activities and could cause customers to reduce or delay their software spending. For example, we believe there could be some short-term impact from the COVID-19 pandemic on spending by our customers. At this time, the potential impact on customer spend from the COVID-19 pandemic is difficult to predict and, therefore, it is not possible to fully determine the impact on our future results. Historically, economic downturns have resulted in overall reductions in software spending. If macroeconomic conditions deteriorate or are characterized by uncertainty or volatility, customers may curtail or freeze spending on software in general and for software such as ours specifically, which could have an adverse impact on our business, financial condition, and operating results.

We have historically generated a majority of our revenue from customers in the financial services, life sciences, and U.S. federal government verticals. While these verticals have not been affected as severely by weak economic conditions caused by COVID-19 as the retail, hospitality, and entertainment industries, we cannot assure these verticals will not suffer more severe losses in the future. Furthermore, we cannot predict the timing, strength, or duration of any economic slowdown or recovery. In addition, even if the overall economy is robust, we cannot assure the market for services such as ours will experience growth or that we will experience growth.

We may fail to meet our publicly announced guidance or other expectations about our business and future operating results, which could cause our stock price to decline.

We have provided and may continue to provide guidance about our business, future operating results, and other business metrics. In developing this guidance, our management must make certain assumptions and judgments about our future performance. Some of those key assumptions relate to the impact of COVID-19 and the associated economic uncertainty on our business and the timing and scope of economic recovery globally, which are inherently difficult to predict. Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our business results may vary significantly from such guidance or that consensus due to a number of factors, many of which are outside of our control, including due to the global economic uncertainty and financial market conditions caused by the COVID-19 pandemic, which could adversely affect our operations and operating results. Furthermore, if our publicly announced guidance of future operating results fails to meet our previously announced guidance or the expectations of securities analysts, investors, or other interested parties, the price of our common stock would decline.

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 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 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.

If we are unable to successfully transition to new leadership in key departments, our results could suffer.

Appian has undergone change in departments that are directly responsible for substantially all of Appian's revenue. While Appian believes its new leaders in these departments are highly qualified and will perform well in their roles, there can be no assurances the transition to new leadership will be executed without any disruption or effect on performance. New leadership requires time to become familiar with Appian's product offerings and its customer base, and such transition could lead to delayed implementation of strategies, revision of key practices and policies, re-training of personnel, and other disruptions.

While we will make efforts to mitigate such risk through extensive collaboration at the executive level, the effects of this transition could have an impact on our ability to sustain our growth in revenues or our ability to retain existing talent within the organization.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

a. Recent Sales of Unregistered Equity Securities

Not applicable.

b. Use of Proceeds

Not applicable.

c. Issuer Purchases of Equity Securities

Not applicable.

Item 3. DEFAULTS UPON SENIOR SECURITIES

Not applicable.

Item 4. MINE SAFETY DISCLOSURES

Not applicable.

Item 5. OTHER INFORMATION

Not applicable.

Item 6. EXHIBITS

Exhibit No.	Description	Reference
10.1	Separation Agreement, dated as of May 1, 2020, by and between Appian Corporation and David Mitchell.	Attached.
10.2	Employment Agreement, dated as of May 6, 2020, by and between Appian Corporation and Eric Cross.	Attached.
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Attached.
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	Attached.
32.1	Certifications of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	Attached.
101.INS	XBRL Instance Document - The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.	Attached.
101.SCH	XBRL Taxonomy Extension Schema Document	Attached.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	Attached.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	Attached.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	Attached.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	Attached.
104	Cover page formatted as Inline XBRL and contained in Exhibit 101	Attached.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

		APPIAN CORPORATION
August 6, 2020	By:	/s/ Matthew Calkins
		Name: Matthew Calkins
		Title: Chief Executive Officer and Chairman of the Board (on behalf of the Registrant and as Principal Executive Officer)

Exhibit 10.1

SEPARATION AGREEMENT AND GENERAL RELEASE

AGREEMENT made this 1st of May 2020, by and between Appian Corporation ("Appian") and David Mitchell ("Employee").

WHEREAS, Appian and Employee mutually desire to reach an agreement as to the rights, benefits and obligations of Appian and Employee concerning Employee's employment with Appian and the Employee's separation from employment with Appian, the parties agree as follows:

1. Separation Date. Employee's last day of employment shall be May 31, 2020 (the "Separation Date").

2. Separation Benefits and Consideration. In consideration of Employee's execution of this Separation Agreement and General Release including but not limited to the General Release and Waiver set forth in Paragraph 3, below, and Employee's agreement to cooperate reasonably through May 31, 2020 in the transfer of Employee's duties and responsibilities to management and return equipment as set forth in Paragraph 5 below, Appian agrees to provide Employee the compensation and benefits, subject to customary withholdings for taxes, (the "Separation Benefits") set forth below:

a. Any base salary payments earned up to the Separation Date shall be paid on Appian's normal pay period for such payments on the next regularly scheduled pay date that falls after the Separation Date.

b. Employee shall be paid a lump sum payment of $350,000.00 (1 year), which will be subject to customary withholdings. Such payment shall be paid on the next regularly scheduled pay date that falls at least 8 days after Employee returns this executed Agreement and only after all Company-owned equipment and materials are returned to Appian.

c. Appian shall reimburse Employee's reasonable and documented business expenses in accordance with Appian's Expense Reimbursement Policy within thirty (30) days of submission by Employee.

d. Employee may continue medical benefits coverage under COBRA regulations as permitted by applicable federal laws and regulations provided that Employee timely enrolls in COBRA and makes all required payments.

e. Accrued, unused paid leave (PTO) will be paid to Employee in accordance with Appian's Paid Leave policy.

The Separation Benefits, including continuation of employment through the Separation Date, shall be the sole consideration due from Appian to Employee relating to Employee's employment with Appian and this Separation Agreement and General Release. Employee understands that by offering this Separation Benefit and entering into this Agreement, Appian does not admit liability for any wrongful or unlawful act in connection either with Employee's separation from employment or with making this offer.

3. Employee General Release and Waiver. Employee voluntarily and knowingly executes this General Release and Waiver in consideration of the compensation and benefits set forth in Paragraph 2 above. With the intention of binding Employee, Employee's heirs, and Employee's personal and/or legal representatives, successors, and assigns, Employee does hereby waive, release, and forever discharge Appian and/or its successors, assigns, subsidiaries, affiliated or related entities, and/or its owners, officers, employees, directors, agents, and representatives ("Appian and its Affiliates") of all charges, complaints, causes of action, and claims of any kind, including but not limited to claims under Title VII of the Civil Rights Act of 1964, as amended, the Americans with Disabilities Act, the Rehabilitations Act of 1973, WARN Act, any other federal, state or local law prohibiting discrimination on account of Employee's race, color, sex, marital status, age, national origin or any disability that Employee may have, arising from or relating to his/her employment with Appian or termination therefrom and any and all charges, complaints, causes of action, and claims Employee might have under any State or Federal law or common law, for back pay, sales commissions, overtime wages, front pay, lost benefits, compensatory damages, liquidated damages, punitive damages, attorneys' fees and costs, or any other damages arising from events, acts, or omissions which occurred prior to the date the Employee executes this Agreement, whether such claims are presently known or hereafter discovered. This release of claims includes but is not limited to: a) any claims the Employee may have arising from the terms and conditions of employment by Appian and its Affiliates, its subsidiaries, or termination from employment, b) any claim for reemployment or reinstatement with Appian and its Affiliates; and c) any claim for wages, commissions or compensation as well as d) any claim for attorney's fees, settlement costs, or any other costs incurred by Employee in connection with this Agreement. This waiver does not apply to any rights or claims that relate to events that may occur after the date this Agreement is effective.

4. Employee expressly releases Appian and its Affiliates from any and all charges, complaints, claims, liabilities, agreements, damages, actions, causes of action, suits, rights, costs, and expenses (including attorneys' fees and costs incurred) of any nature whatsoever, known or unknown, suspected or unsuspected, relating to or arising under the Age Discrimination in Employment Act ("ADEA"). In connection with any claim that Employee may have against the Appian and its Affiliates under the ADEA Employee acknowledges the following: (i) Employee has been advised in writing to consult with an attorney regarding this Agreement; (ii) Employee has consulted with, or has been given an opportunity to consult with, an attorney with respect to this Agreement; (iii) Employee may, for a period of 21 days, consider the offer represented by this Agreement; (iv) Employee may revoke his acceptance of the release of age discrimination claims provided he does so within 7 days after his execution hereof, and (v) this Agreement does not affect claims under the ADEA arising after Employee executes this Agreement. Any changes made to this Agreement after presentation to Employee will not restart the running of the twenty-one (21) day period. After executing this Agreement, Employee shall have seven (7) days during which time Former Employee may revoke his consent to this Agreement by giving written notification of her decision to revoke to Chris Winters.

5. Cooperation/Return of Equipment. Employee agrees that up through May 31, 2020, Employee shall reasonably cooperate in the transfer of Employee's job responsibilities to a designated Appian representative, including without limitation, documentation and participation in meetings. Employee shall return all Appian equipment provided to Employee promptly, including, but not limited to, computers and other office equipment, in good condition, subject to fair wear and tear from use, in accordance with Appian's instructions. Employee will not receive Separation Benefits until Employee has returned all Appian equipment.

6. Confidentiality. Employee agrees that the terms of this Separation Agreement and General Release shall remain strictly confidential except that Employee shall be permitted to tell Employee's spouse, if any, lawyers and accountants about the terms of this Separation Agreement and Release provided that they agree to maintain in confidence the terms of the Separation Agreement and Release. Violation of the terms of this paragraph will subject Employee to liquidated damages in the amount of the payments set forth in paragraph 2 above.

7. Nondisparagement. Employee agrees that Employee will not disparage, defame, criticize or vilify Appian and its Affiliates, including its management and employees, and will not disparage the business or employment practices of Appian and its Affiliates. Appian and its Affiliates agree not to disparage, defame, criticize or vilify Employee.

8. Non-Solicitation of Employees. For a period of one (1) year from the Separation Date, Employee agrees not to a) hire; b) solicit for employment; or c) otherwise participate in the hiring process regarding, any employee of Appian employed as of the Separation Date.

9. No Employee Assignment. This Agreement may not be assigned, in whole or in part, by Employee and shall fully bind, and inure to the benefit of, the heirs, successors and representatives of the parties.

10. Acknowledgment. Employee acknowledges that Employee has read and understands the Agreement and executes it voluntarily and without coercion. Employee further acknowledges that Employee is hereby advised of Employee's right to consult with an attorney of Employee's choice at Employee's own expense prior to executing this Agreement. Finally, Employee acknowledges and agrees that the payments and promises reflected in this Agreement constitute good and sufficient consideration for the foregoing waiver and release, as well as the other promises made herein.

11. Entire Agreement. The Agreement is the final and complete agreement between the parties as to the subject matter herein, and shall, to the extent it conflicts with any prior oral or written agreement between the parties, supersede such prior agreements with the exception executed Non-Disclosure/Non-Compete/Confidentiality Agreements, including the Restrictive Covenants and all confidentiality and non-disclosure provisions of the Appian Corporation Employment Agreement between the parties executed on February 16, 2018, which shall remain in full force and effect and is incorporated herein. No modification of this Agreement shall be made unless in writing and signed by both parties.

12. Revocation. Employee has been advised that, if he/she signs this Agreement, he/she will be given seven days following the date of signing in order to revoke the Agreement. The revocation shall be made in a writing signed by Employee, and hand-delivered, faxed, or e-mailed to Dawn.Mitchell@appian.com of the Company. (If the seventh day falls on a weekend or holiday, then the written revocation must be received by the Company on the next business day following such weekend or holiday.) This Agreement will become effective on the eighth day after it is signed by Employee, if not revoked.

13. Deadline to Sign: The Employee has been offered severance conditioned upon executing and returning the Separation Agreement and General Release. The Employee may, until May 22nd, 2020, consider the offer represented by the Agreement.

14. Choice of Law/Jurisdiction. This Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to any choice or conflict of law principles. The parties agree to submit to the exclusive jurisdiction of, and venue in, Fairfax County, Virginia in any dispute arising out of or relating to this agreement.

EMPLOYEE	APPIAN CORPORATION
/s/ David Mitchell	/s/ Matthew Calkins
Signature	Signature
5/4/20	5/6/20
Date	Date

Exhibit 10.2

APPIAN CORPORATION EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT ("Agreement") is made by and between APPIAN CORPORATION, a Delaware corporation, and its affiliates, successors, assigns and agents ("Appian" or "Company"), and **Eric Cross** ("you" and all similar references or "employee") (collectively, the "parties") in consideration of employee's at-will employment relationship with Appian.

1. Employment. By accepting employment with Appian, you agree: (a) to devote your professional time, best efforts, attention and energies to Appian's business and to refrain from outside employment or professional practice other than on account of or for the benefit of Appian (unless Appian consents in writing to such outside work); (b) to perform any and all work assigned to you by Appian faithfully and at such times and places as Appian designates; (c) to abide by all policies of Appian, both current and future; and (d) that you are not currently bound by any agreement that could prohibit or restrict you from being employed by Appian or from performing any duties under this Agreement.

2. Compensation and Benefits. Upon the commencement of your employment, Appian will pay you as provided in your offer letter (or as otherwise agreed in writing), payable in accordance with its normal payroll practices. From time to time, Appian may adjust your salary and other compensation at its discretion. During your employment, if you meet the minimum requirements of Appian's plans, you will be eligible to participate in any employee compensation or benefit plans (including group health and 401(k)), incentive award programs, and to receive other fringe benefits that Appian may decide to make available to you. Appian may add, amend or discontinue any of its plans, programs, policies and procedures at any time for any or no reason with or without notice.

3. Restrictive Covenants. You further understand that Appian invests significant resources in the training and development of its employees. Therefore, in light of this, you agree to the following restrictions which are reasonably designed to protect Appian's legitimate business interests without unreasonably restricting your ability to seek or obtain work upon voluntary or involuntary termination of your employment with Appian:

   3.1 Prohibition on Competition. During your employment with Appian and for a period of twelve (12) months from the date your employment with Appian terminates, you shall not, within the United States of America, directly or indirectly, provide, aid or assist any other person or entity in providing Similar Products or Services for or on behalf of any Named Company in the same or similar functional capacity as you did for Appian. This provision shall not be construed to prevent you from obtaining employment with any person or entity that provides Similar Products or Services, so long as your new endeavor does not violate the above-stated prohibition.

   3.2 Covenant Not to Solicit or Perform Services for Customers or Prospective Customers. During your employment with Appian and for a period of eighteen (18) months from the date your employment with Appian terminates, you agree not to contact, directly or indirectly, any Customer or Prospective Customer with whom you have had any written, electronic, verbal, or other contact on behalf of Appian, to sell, market, render or provide Similar Products or Services.

   3.3 Covenant Not to Perform Services for Appian's Business Partners. During your employment with Appian and for a period of twelve (12) months from the date your employment with Appian terminates, you agree not to provide, directly or indirectly, Similar Products or Services for or on behalf of any of Appian's Business Partners.

   3.4 Restriction on the Solicitation of Appian's Employees. During your employment with Appian, and for a period of twelve (12) months from the date your employment with Appian terminates, you agree not to, directly or indirectly, induce or solicit any Appian employee to terminate his or her employment or to seek or accept any employment with any other business entity.

   3.5 Prohibition from Employing or Retaining Appian's Employees. During your employment with Appian and for a period of twelve (12) months from the date your employment with Appian terminates, you agree not to retain, hire or employ, directly or indirectly, any Appian employee who was employed by Appian on your termination date, or during the twelve (12) months preceding your termination date.

   3.6 Definitions. For the purpose of this Section of the Agreement, the following definitions shall apply:

3.6.1 "Similar Products or Services" shall include (i) any Low-Code software development Platform, Business Process Management software, Case Management software, Application Platform as a Service, or workflow software product, whether sold as an on-premise, hosted, or Software-as-a-Service offering; (ii) e-procurement systems; and (iii) any services pertaining to the implementation of such software technologies described in items 3.6.1(i)-3.6.1(ii) above.

3.6.2 "Customer" means any entity for which Appian has performed Services during your employment with the Company.

3.6.3 "Named Company" shall include any one of the companies listed in Exhibit A. At any time during the Specified Periods, in any year that this agreement is in effect, Appian may modify or replace companies listed in Exhibit A, at Appian's sole discretion; however, Appian must, in good faith, believe that all companies listed in Exhibit A are competitors of Appian. At any time, you may request a copy of Exhibit A from Appian's legal department.

3.6.4 "Specified Period" means one of the following quarterly two week periods: January 1 through January 15; April 1 through April 15; July 1 through July 15; and October 1 through October 15.

3.6.5 "Prospective Customer" means any entity that is not a Customer but with respect to whom, within twelve (12) months from your termination date, you conducted, prepared, submitted (or assisted or supervised such conduct) any proposal, client development work product or marketing efforts on behalf of Appian.

3.6.6 The term "Business Partner" means any entity that had a contractual agreement with Appian during your employment with the Company to engage in joint marketing and/or sales efforts, professional services (as a prime contractor or subcontractor), or as a re-seller of the Company's software.

3.6.7 The term "induce" means the act or process of enticing or persuading another person to take a certain course of action.

3.6.8 The term "solicit" means the act or process of obtaining by entreaty, persuasion, or application, formal or otherwise, a certain course of conduct.

3.7 Reasonableness of Restrictions. You agree that the restrictions set forth in this Section are reasonable, proper and no greater than necessary to protect the legitimate business interest of Appian and do not constitute an unlawful or unreasonable restraint upon your ability to earn a livelihood. In the event that any term set forth above including, but not limited to, the duration of the restraint or the geographic scope, is held unenforceable by court of competent jurisdiction, the parties agree that the unenforceable term may be reduced or modified by the court of competent jurisdiction.

3.8 Waiver. Any of the provisions listed in Sections 3.1 – 3.5 above may be waived in advance only with the express written consent of the CEO of Appian Corporation.

4. Employee Representations. You represent and warrant that you have the legal ability to perform your duties for Appian and that your employment does not violate the terms of any agreement, whether written or otherwise, including but not limited to any non-compete agreement, that would limit or impair your ability to perform your duties. You further represent and warrant that you will not use any confidential or proprietary information from a prior employer, or any other third party.

5. Nondisclosure of Confidential Information. You acknowledge that all information related to the business of Appian that is not in the public domain, nor available from sources other than Appian is considered Confidential. For the purpose of this Agreement, Confidential Information also includes Appian's Trade Secrets and/or Proprietary Information and Confidential Information of third parties provided to Appian under terms of a confidentiality or nondisclosure agreement.

   For the purpose of this Agreement, the definition of a "Trade Secret" shall be congruent with the Virginia Uniform Trade Secret Act, Virginia Code Section 59.1-336(4). "Proprietary Information" includes, but is not limited to, the following types of information (whether or not reduced to writing): Appian's fees, rates, sales data, customer lists, discoveries, inventions, concepts, software in various states of development and related documentation, design sheets, design data, drawings, design specifications, techniques, consulting or development methodologies, models, source code, object code, documentation, diagrams, flow charts, research, development, processes, training materials, templates, procedures, “know-how,” tools, client identities, client accounts, web design needs, client advertising needs and history, client reports, client proposals, product information and reports, accounts, billing methods, pricing, data, sources of supply, business methods, production or merchandising systems or plans, marketing, sales and business strategies and plans, finances, operations, and information regarding employees. Notwithstanding the foregoing, information publicly known that is generally employed by the trade at or after the time you first learn of such information (other than as a result of your breach of this Agreement) shall not constitute Proprietary Information.

You agree to hold Confidential Information in the strictest of confidence and further agree not to release, divulge, misappropriate, publish or communicate Confidential Information to any person or entity outside of Appian without the express written consent of Appian’s CEO or his express designee. You understand that the obligations contained in this Section are effective upon your first day of employment, or earlier (if you receive Confidential Information sooner), and shall survive the expiration of this Agreement, regardless of the reason your employment with Appian is terminated. Furthermore, nothing contained in this Section of the Agreement is designed to waive its statutory rights to seek relief pursuant to the Virginia Trade Secrets Act, Virginia Code Section 59.1-336 et seq.

6. Inventions. For the purposes of this Agreement, "Inventions" mean any concepts, ideas, processes, designs, specifications, improvements, discoveries or other developments, whether or not reduced to practice or patentable, that you conceive or create, in whole or in part, alone or jointly with others, during your employment by the Company, whether during normal work hours or otherwise, if such Inventions meet one of the following conditions (i) the Inventions directly relate to the Company's business (including without limitation the Company's present or contemplated products and research) or to tasks assigned to you by or on behalf of the Company or (ii) the Inventions are written or developed using any of the Company's equipment, facilities, materials, trade secrets, labor, money, time or other resources. "Inventions" also shall be deemed to include any concepts, ideas, processes, designs, specifications, improvements, discoveries or other developments, whether or not reduced to practice or patentable, that you conceive or create within ninety (90) days after your employment with the Company ends that directly relate to the Company's business as conducted prior to the date your employment ended or to any tasks assigned to you by or on behalf of the Company at any time during the last two (2) years of your employment by the Company. “Inventions” do not include any concepts, ideas, processes, designs, discoveries or other developments reduced to practice prior to joining Appian.

6.1 Assignment of Inventions. You agree that all Inventions are the sole and exclusive property of the Company and hereby assign to the Company all right, title and interest in all Inventions.

7. Termination and Resignation. Your employment is terminable at-will. That means that you or Appian may terminate your employment relationship at any time, for any reason or no reason at all. Except as set forth below, in the event that you terminate your employment, you will be entitled to earned and unpaid salary, less required and authorized withholdings and deductions, through your last day of employment. Regardless of the basis of your termination of employment, you agree to provide all assistance requested by Appian in transitioning your duties, responsibilities, clients and other Appian relationships to other Appian personnel, both during your employment and after your termination or resignation. Furthermore, you agree to cooperate with Appian from time to time as necessary concerning matters that may have arisen during the course of your employment with Appian. Such cooperation is an express condition of this Agreement.

7.1 Termination without Cause in First Year. If your employment with Appian is terminated within the first year without cause, you will receive a payment equal to six (6) months’s salary.

7.2 Change in Control Severance. If Appian experiences a Change in Control (as defined in Exhibit B), and Appian terminates your employment without cause or you terminate your employment for Good Reason (as defined in Exhibit B) within one year of such Change in Control, you will receive the following severance from Appian:

(i) Base Salary Severance. You will receive continuing payments of severance at a rate equal to your base salary rate, less applicable tax withholdings, as in effect immediately prior to your termination of employment or, if greater, as in effect immediately prior to the Change in Control, for six (6) months (“Severance Period”) from the date of such termination of employment, to be paid periodically in accordance with Appian’s normal payroll policies.

(ii) Equity. With respect to any stock options, restricted stock units, or other form of equity allowed by Appian's equity plans ("Unvested Equity") held by you that are unvested at the time of termination, such Unvested Equity shall immediately vest and settle not later than 60 days after the date of your termination.

(iii) Continued Employee Benefits. If you elect continuation coverage pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended ("COBRA") for you and your eligible dependents (as applicable), within the time period prescribed pursuant to COBRA, Appian will reimburse you for, or pay directly on your behalf, the COBRA premiums for such coverage (at the coverage levels in effect immediately prior to your termination of employment) until the earlier of (A) the end of the Severance Period, or (B) the date upon which you and/or your eligible dependents becomes covered under similar plans.

7.3 The severance provided in subsections 7.1 and 7.2 shall have the following contingencies:

(i) Release of Claims Agreement. The receipt of any severance payments or benefits pursuant to this Agreement is subject to you signing and not revoking a separation agreement and release of claims in a form acceptable to Appian (the "Release"), which must become effective and irrevocable no later than the twenty-first (21st) day following your termination of employment (the "Release Deadline"). If the Release does not become effective and irrevocable by the Release Deadline, you will forfeit any right to severance payments or benefits under this Agreement. No severance payments and benefits under this Agreement will be paid or provided until the Release becomes effective and irrevocable, and any such severance payments and benefits otherwise payable between the date of your termination of employment and the date the Release becomes effective and irrevocable will be paid on the date the Release becomes effective and irrevocable.

(ii) Non-Compete, Non-Solicitation, Confidential Information and Invention Assignment Agreements. Your receipt of any payments or benefits under Section 7.1 and 7.2 will be subject to you continuing to comply with Sections 3, 5 and 6 of this Agreement. Any breach of those terms shall result in your immediate forfeiture of all severance benefits.

8. Return of Company Materials. Upon the termination of your employment with Appian, regardless of the basis of the termination, you shall promptly deliver to Appian any of the following items or materials: any laptop or personal computer issued to you, or paid for, by Appian; any material, in any form whatsoever, that constitutes Appian's Confidential Information, Trade Secret and/or Proprietary Information; the Employee Handbook; the Consulting Best Practices Book ("CBP"); and any other material that is the property of Appian Corporation or Appian Corporation's customers, including, but not limited to, books, key cards, passes, and other material. You agree that, to the extent permissible by law, Appian may withhold payment of any compensation or reimbursements until you return all such Appian materials.

9. Authority Limited. It is expressly agreed that you shall have no right or authority at any time to make any contract or binding promise of any nature on behalf of Appian, without Appian's express written consent except within established duties of your employment.

10. Assignment and Survival. The rights and obligations of Appian under this Agreement shall inure to the benefit of, and shall be binding upon, the successors and assigns of Appian. Your rights and obligations are personal and may not be assigned or delegated without the Company's proper written consent. However, if you become deceased prior to the expiration of this Agreement, any sums that may be due to you as of the date of your death shall be paid to your executor, administrator, heirs, personal representative, successors or assigns. Furthermore, it is expressly understood that the obligations under Sections 3, 4, or 5 of this Agreement shall survive any termination of this Agreement.

11. Remedies. You acknowledge that the damages Appian will suffer as a result of your breach of any provision of Sections 3, 4, or 5 of this Agreement may be impossible to reasonably calculate and that violation of this Agreement will irreparably harm Appian. Accordingly, you agree that Appian will be entitled, in addition to all other rights and remedies that may be available, to obtain injunctive relief enjoining and restraining you from committing a breach of this Agreement. You also agree that in the event Appian is successful in whole or in part in any legal action against you under this Agreement, Appian will be entitled to recover all costs, including reasonable attorney fees from you.

12. Severability. If any provision of this Agreement is held invalid or unenforceable for any reason, the invalidity shall not nullify the validity of the remaining provisions of this Agreement. If any provision of this Agreement is

determined by a court to be overly broad in duration, geographical coverage or scope, or unenforceable for any other reason, such provision will be narrowed so that it will be enforced as much as permitted by law.

13. Choice of Law. The laws of the Commonwealth of Virginia shall govern this Agreement. You and Appian consent to the jurisdiction and venue of any state or federal court in the Commonwealth of Virginia.

14. Waiver. Any party's waiver of any other party's breach of any provision of this Agreement shall not waive any other right or any future breaches of the same or any other provision. Appian's CEO may, in his or her sole discretion, waive in writing any provision of this Agreement.

15. Notices. Any notices, requests, demands or other communications provided for in this Agreement shall be in writing and shall be given either manually or by certified mail. Notice to Appian shall be addressed to Human Resources. Notice to you shall be addressed to the last address you have filed with Human Resources. You may change your address by providing written notice in accordance with this Section. If you fail to keep Appian informed of your most recent address, you agree to waive any claim against Appian related to any damage you may suffer as a result of Appian failing to provide you with a notice under this or any other Agreement you may have with Appian.

16. Entire Agreement. This Agreement is the entire agreement between you and Appian regarding these matters and supersedes any verbal and written agreements on such matters. This Agreement may be modified only by a written agreement signed by you and Appian's CEO. All Section headings are for convenience only and do not modify or restrict any of this Agreement's terms.

17. Counterparts. For convenience of the parties, this Agreement may be executed in one or more counterparts, each of which shall be deemed an original for all purposes.

The parties state that they have read, understood and agree to be bound by this Agreement and that they have had the opportunity to seek the advice of legal counsel before signing it and have either sought such counsel or have voluntarily decided not to do so:

APPIAN CORPORATION	EMPLOYEE
By: /s/ Matthew Calkins	By: /s/ Eric Cross
Date: 5/6/20	Date: 5/4/20

Employment Agreement
Exhibit A

Named Companies:

1. BizAgi
2. K2
3. OpenText
4. Pegasystems, Inc.
5. Salesforce.com
6. ServiceNow
7. Outsystems
8. Mendix
9. Unqork, Inc.

Exhibit B
Additional Definitions

"Change in Control" means the occurrence of any of the following:

(i) A change in the ownership of Appian that occurs on the date that any one person or entity, or more than one person or entity acting as a group ("Person"), acquires ownership of the stock of Appian or that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Appian, provided that such Person is not Matthew Calkins; or

(ii) A change in the effective control of Appian that occurs on the date that a majority of members of the Board (each, a "Director") of Appian is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election, except where such replacement of the Directors is as a result of Matthew Calkins voting a majority of Appian's shares in favor of such replacement. For purposes of this subsection (ii), if any Person is considered to be in effective control of Appian, the acquisition of additional control of the Parent by the same Person will not be considered a Change in Control; or

(iii) A change in the ownership of a substantial portion of Appian's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from Appian that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of Appian's assets: (A) a transfer to an entity that is controlled by Appian's stockholders immediately after the transfer, or (B) a transfer of assets by Appian to: (1) a stockholder of Appian (immediately before the asset transfer) in exchange for or with respect to Appian's stock, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by Appian, (3) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of Appian, or (4) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in this subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of Appian, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition of Change in Control, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company or Parent.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Internal Revenue Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the state of Appian's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held Appian's securities immediately before such transaction.

"Good Reason" shall mean:

(i) a diminution in your base compensation or target bonus below the amount as of the date of this Agreement or as increased during the course of his employment with Appian, if the material diminution in your base compensation occurs within (A) 60 days prior to the consummation of a Change in Control where such Change in Control was under consideration at the time of your termination or (B) twelve (12) months after the date upon which such a Change in Control occurs;

(ii) a material diminution in your title;

(iii) a requirement that you move your primary residence as a condition of your employment; or

(iv) any action or inaction that constitutes a material breach by Appian of this Agreement; provided, however, that for you to be able to terminate your employment with Appian on account of Good Reason, you must provide notice of the occurrence of the event constituting Good Reason and your desire to terminate your employment with Appian on account of such within ninety (90) days following the initial existence of the condition constituting Good Reason, and Appian must have a period of thirty (30) days following receipt of such notice to cure the condition. If Appian does not cure the event constituting Good Reason within such thirty (30) day period, your termination shall be effective the day immediately following the end of such thirty (30) day period, unless Appian provides for an earlier termination.

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Matthew Calkins, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2020 of Appian Corporation (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: August 6, 2020

/s/ Matthew Calkins
Matthew Calkins
Chief Executive Officer
(principal executive officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Mark Lynch, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the period ended June 30, 2020 of Appian Corporation (the "registrant");

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 6, 2020

/s/ Mark Lynch
Mark Lynch
Chief Financial Officer
(principal financial officer)

Exhibit 32.1

CERTIFICATIONS OF
PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Pursuant to the requirement set forth in Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), Matthew Calkins, Chief Executive Officer of Appian Corporation (the “Company”), and Mark Lynch, Chief Financial Officer of the Company, each hereby certifies that, to the best of his knowledge:

1. The Company’s Quarterly Report on Form 10-Q for the period ended June 30, 2020, to which this Certification is attached as Exhibit 32.1 (the “Periodic Report”), fully complies with the requirements of Section 13(a) or Section 15(d) of the Exchange Act; and

2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

IN WITNESS WHEREOF, the undersigned have set their hands hereto as of the 6th day of August, 2020.

/s/ Matthew Calkins	/s/ Mark Lynch
Matthew Calkins	Mark Lynch
Chief Executive Officer (principal executive officer)	Chief Financial Officer (principal financial officer)

- This certification accompanies the Form 10-Q to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act (whether made before or after the date of the Form 10-Q), irrespective of any general incorporation language contained in such filing.