

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

FORM 10-K

- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

- 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 001-37468

AppFolio, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State of incorporation or organization)

26-0359894

(I.R.S. Employer Identification No.)

50 Castilian Drive

Santa Barbara, California

(Address of principal executive offices)

93117

(Zip Code)

(805) 364-6093

Registrant's telephone number, including area code

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

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of exchange on which registered</u>
Class A common stock, par value \$0.0001 per share	APPF	The NASDAQ Stock Market LLC

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

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

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. (Check one):

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 Act). Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant, based on the closing price of the registrant's Class A common stock on June 28, 2019 (the last business day of the registrant's mostly recently completed second fiscal quarter), as reported on the NASDAQ Global Market on such date, was approximately \$1.786 billion. Shares of the registrant's Class A common stock and Class B common stock held by each executive officer, director and holder of 10% or more of the registrant's outstanding Class A common stock and Class B common stock have been excluded from this calculation as such persons may be deemed to be affiliates. The determination of affiliate status for this purpose does not reflect a determination that any of such persons shall be deemed to be an affiliate of the registrant for any other purpose.

At February 14, 2020, the number of shares of the registrant's Class A common stock outstanding was 16,591,623 and the number of shares of the registrant's Class B common stock outstanding was 17,566,442.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2020 Annual Meeting of Stockholders (the "Proxy Statement"), to be filed with the Securities and Exchange Commission (the "SEC") pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this Annual Report on Form 10-K (this "Annual Report"), are incorporated by reference in Part III, Items 10-14 of this Annual Report. Except for the portions of the Proxy Statement specifically incorporated by reference in this Annual Report, the Proxy Statement shall not be deemed to be filed as part hereof.

APPFOLIO, INC.
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2019

TABLE OF CONTENTS

	Section	Page No.
<u>Cautionary Note Regarding Forward-Looking Statements</u>		1
<u>Part I</u>		
Item 1. <u>Business</u>	2	
Item 1A. <u>Risk Factors</u>	9	
Item 1B. <u>Unresolved Staff Comments</u>	32	
Item 2. <u>Properties</u>	32	
Item 3. <u>Legal Proceedings</u>	33	
Item 4. <u>Mine Safety Disclosures</u>	33	
<u>Part II</u>		
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	34	
Item 6. <u>Selected Financial Data</u>	36	
Item 7. <u>Management's Discussion Analysis of Financial Condition and Results of Operation</u>	37	
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	51	
Item 8. <u>Financial Statements and Supplementary Data</u>	51	
Item 9. <u>Changes in and Disagreements With Accountants on Accounting and Financial Disclosures</u>	85	
Item 9A. <u>Controls and Procedures</u>	85	
Item 9B. <u>Other Information</u>	86	
<u>Part III</u>		
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	86	
Item 11. <u>Executive Compensation</u>	86	
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	86	
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	86	
Item 14. <u>Principal Accounting Fees and Services</u>	86	
<u>Part IV</u>		
Item 15. <u>Exhibits and Financial Statement Schedules</u>	86	
<u>Signatures</u>		89

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (this "Annual Report") for the fiscal year ended December 31, 2019 (fiscal 2019), includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), which statements are subject to considerable risks and uncertainties. These forward-looking statements are intended to qualify for the safe harbor from liability established by the Private Securities Litigation Reform Act of 1995. Forward-looking statements include all statements included in or incorporated by reference in this Annual Report that are not statements of historical facts, which can generally be identified by words such as "anticipates," "believes," "seeks," "estimates," "expects," "intends," "may," "plans," "potential," "predicts," "projects," "should," "could," "will," "would" or similar expressions and the negatives of those expressions. Forward-looking statements also include the assumptions underlying or relating to such statements. In particular, forward looking statements contained in this Annual Report relate to, among other things, our future or assumed financial condition, results of operations and liquidity, business forecasts and plans, certain trends affecting our business and industry, capital needs and financing plans, capital resource allocation plans, potential repurchase of our shares, research and product development plans, future products and Value+ services, growth in the size of our business and number of customers, strategic plans and objectives, the impact of acquisitions and investments, changes in the competitive environment, the outcome of legal proceedings or regulatory matters, and the application of accounting guidance. We caution you that the foregoing list may not include all of the forward-looking statements made in this Annual Report.

Our forward-looking statements are based on our management's current beliefs, assumptions and expectations about future events and trends, which affect or may affect our business, strategy, operations or financial performance. Although we believe these forward-looking statements are based upon reasonable assumptions, they are subject to numerous known and unknown risks and uncertainties and are made in light of information currently available to us. Our actual financial condition and results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below under the caption "Risk Factors" in Part I, Item 1A and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7, and elsewhere in this Annual Report, as well as in the other reports we file with the Securities and Exchange Commission (the "SEC"). You should read this Annual Report with the understanding that our actual future results may be materially different from the results expressed or implied by these forward-looking statements.

Moreover, we operate in an evolving environment. New risks and uncertainties emerge from time to time and it is not possible for our management to predict all risks and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual future results to be materially different from those expressed or implied by any forward-looking statements.

Forward-looking statements speak only as of the date they were made, and, except to the extent required by law or the rules of the NASDAQ Global Market, we undertake no obligation to update or review any forward-looking statement because of new information, future events or other factors.

We qualify all of our forward-looking statements by these cautionary statements.

PART I

ITEM 1. BUSINESS

Unless otherwise stated in this Annual Report, references to "AppFolio," "we," "us," and "our" refer to AppFolio, Inc. and its consolidated subsidiaries.

Overview

Our mission is to revolutionize vertical industry businesses by providing great software and services. To that end, today we offer industry-specific, cloud-based business software solutions, services and data analytics to the real estate market, which represents over 90% of our revenue, and, to a lesser extent, to the legal market. Although specific functionality varies by product, our core solutions address common business operations and interactions of businesses in our targeted verticals. In addition to our core solutions, we offer a range of optional, but often business-critical, Value+ services. Our Value+ services are built to enhance, automate and streamline processes and support workflows essential to our customers' businesses.

Our real estate software solutions provide our property management customers (including third-party property managers and owner-operators who manage single- and multi-family residences, community associations, commercial properties, and student housing, as well as mixed real estate portfolios) with a system of record to automate essential business processes, a system of engagement to enhance business interactions between our customers and their clients and other stakeholders, and a system of intelligence designed to leverage data to predict and optimize business workflows in order to enable superior customer experiences and increase efficiency across our customers' businesses. Our mobile-optimized software solutions are designed for use across multiple devices and operating systems. Our software solutions are all offered as a service for our customers and hosted using a modern cloud-based architecture. This architecture leads to rich data sets that have a consistent schema across our customer base and enables us to deploy data-powered products and services for our customers. We also provide software solutions to the legal market that enable law firms to administer their practice and manage their caseloads more efficiently by centralizing case details in a single system of record and system of engagement.

Many companies face a common set of challenges that divert limited time and resources away from serving their clients and growing their businesses. In certain industries, day-to-day operations may be managed through inefficient manual processes and disparate software point solutions. This lack of automation and integrated technology results in a significant administrative burden on these businesses, particularly in industries that involve unique workflows, relationships among multiple industry participants, significant data inputs and management, and compliance or regulatory requirements. While larger enterprises and consumers have been experiencing a transformational shift into the digital age, the legacy systems and manual business processes currently used by many other businesses are lagging behind in terms of technological sophistication and ease of use.

For the years ended December 31, 2019, 2018 and 2017, our revenue was \$256.0 million, \$190.1 million and \$143.8 million, respectively. During each of these years we have derived more than 90% of our revenue from our solutions serving the real estate market, primarily property management companies. Our revenue has limited seasonality as discussed in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report, within the section entitled "Quarterly Revenue and Cost Trends."

We sell our software solutions and services through our direct sales organization and from within our software applications. We offer our core solutions to customers on a subscription basis, with subscription fees that scale to the size and type of their businesses. Customers who adopt our Value+ services pay either subscription fees or usage-based fees, depending on the Value+ service. We do not separately charge customers for ongoing training and support, which we believe is critical to retaining customers and increasing adoption and utilization of our Value+ services. We also charge one-time fees in connection with certain services.

We evaluate the success of our business during the periods presented based on factors such as the development and launch of new and innovative core functionality and Value+ services, enhancements to user experience, customer satisfaction, growth in our revenue and customer base, fluctuations in costs and operating expenses as a percentage of revenue, operating loss or income and cash flows from operating activities. We have managed, and plan to continue to manage, our business towards the achievement of long-term growth that we believe will positively impact long-term stockholder value, and not towards the realization of short-term financial or business metrics, or short-term stockholder value. We have invested, and intend to continue to invest, in our business to capitalize on our market opportunity.

Our business, including our core functionality and Value+ services, as well as our customers and other stakeholders in the vertical markets we serve, is subject to constantly evolving laws, rules and regulations, any or all of which may impede our growth or diminish our existing business. Despite our significant efforts to monitor and comply with this evolving legal and regulatory landscape, we may be unable to do so, and new or existing laws, rules and regulations may lead to increased litigation, investigation or other legal proceedings and related costs, diversion of management resources, and limitations on our ability to conduct our business, any of which may negatively impact our ability to meet our long term corporate objectives.

Real Estate Market

In 2008, we entered the real estate market with our first product, AppFolio Property Manager ("APM"), a property management solution designed to address the unique operational and business requirements of property management companies. Recognizing that our customers and their stakeholders would benefit from additional business critical services, we launched a series of Value+ services beginning in 2009. Our first Value+ service assisted our customers in the marketing of their rental properties by offering property level website design and hosting services. In 2010, we commenced the roll out of our electronic payment services, thereby facilitating the payment of rent via ACH by tenants. In 2011, we launched tenant screening services, further assisting our customers with the leasing process. In 2012, we introduced our legal liability to landlord insurance program, which protects property owners and managers from certain defined losses. In 2013, we expanded our electronic payment services by allowing residents to pay rent by electronic cash payment ("ECP") and credit or debit card. In 2014, we launched a tenant-facing contact center solution to assist our property managers with resolving incoming maintenance requests. In 2015, we expanded the marketing services offered to our property management customers with a premium leads service built on technology acquired with our acquisition of RentLinx LLC ("RentLinx") and expanded our electronic payment services to facilitate payments made between our customers and property owners and vendors. In 2016, we introduced a tenant debt collection Value+ service to assist our property managers with running a more efficient business with the collection of past due rents. In 2017, we expanded our insurance services to enable tenants to purchase renters insurance from within APM, protecting both our property management customers and their tenants. In 2018, we acquired substantially all of the assets of WegoWise, Inc. ("WegoWise"), a provider of cloud-based utility analytics software solutions, and began offering AppFolio Utility Management as a Value+ service to our property management customers in mid-2019. In 2018, we also released AppFolio Property Manager PLUS, ("APM PLUS"), a new tier of APM designed for larger businesses with more complex needs. APM PLUS builds upon the functionality of APM and additionally offers data analytics, configurable workflows, and revenue management and optimization functionality for our customers. In January 2019, we acquired Dynasty Marketplace, Inc. ("Dynasty"), a provider of advanced artificial intelligence ("AI") solutions for the real estate market, and began offering an AI Leasing Assistant, Lisa, as a Value+ service to our property management customers in mid-2019. In April 2019, we launched AppFolio Investment Management, which enables real estate investment managers to better manage their investor relationships by increasing transparency and streamlining certain business processes.

Our Real Estate Solutions

Although specific functionality varies by product, our core real estate solutions address common business operations and interactions of property managers by providing key functionality, including accounting, document management, real-time interactive search, data analytics and communication options. Our optional, but often business-critical Value+ services, which make up a significant portion of our revenue, enable our customers to adapt our platform to their specific operational requirements. Many of the software solutions and Value+ services we offer in the real estate market are subject to certain legal, regulatory and other requirements and, despite our significant efforts to comply with all such requirements, there can be no guarantee that our efforts will be sufficient or that existing laws, rules or other requirements will not be interpreted, revised, augmented or rewritten in a way that adversely affects our real estate solutions and Value+ services, which comprise a significant majority of our business. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

AppFolio Property Manager - Core Solution

APM is a cloud-based software solution that provides property management customers of various sizes innovative tools and services designed to streamline their property management businesses. Our software solution serves a variety of property types, including single- and multi-family residential, commercial, community association, and student housing, and is continuously evolving to help our customers more effectively market, manage, and grow their businesses. Core functionality addresses key operational issues, including accounting and business analytics and management, marketing and leasing functionality, and communications with key stakeholders. APM PLUS, builds upon the functionality of APM and additionally offers data analytics, configurable workflows, and revenue management and optimization functionality for our large and more complex property management customers.

AppFolio Property Manager - Value+ Services

In addition to our core solution, we offer a range of optional, but often business-critical, Value+ services built to enhance, automate and streamline property management processes and support workflows essential to our customers' businesses. Our Value+ services generally fall into the categories of marketing and leasing, electronic payment services, resident services, business optimization and risk mitigation. Value+ services are integrated with APM and APM PLUS so customers and their stakeholders may benefit from added efficiency and ease of use.

We deliver and maintain professionally designed and architected **Websites** that showcase our customers' businesses. Our websites are fully-integrated with APM functionality, including vacancy postings, electronic payment services, owner portals, and maintenance requests. Property managers can track and analyze site traffic and lead generation and identify prospects by evaluating guest cards that are completed by prospective tenants who visit the websites in connection with posted vacancies. Features include search engine optimized content including floor plans, video walkthroughs, professional photography and video production, and branding and logo creation.

Our accounting features include **Electronic Payment Services** that allow property managers to streamline their payables and receivables online. Our customers can collect rental application fees, rent payments and other tenant charges through a secure online portal, mobile app, and ECP, as well as receive owner contributions. They can quickly and conveniently pay owners, vendors and their own management company as well.

Tenant Screening Services include background screening and credit checks for use in connection with the rental application process. In addition to obtaining an applicant's credit history, property managers have the option of leveraging an automated nationwide eviction and criminal records search, as well as accessing and/or contributing to rental payments history data, to better identify qualified tenants and reduce risk.

Through wholly-owned subsidiaries, we offer two insurance options, **Liability to Landlord Insurance** and **Renters Insurance**, that can be tailored to help property managers protect their properties and meet renters' needs. Property managers can instantly enroll residents in Liability to Landlord Insurance, which offers owners and investors increased protection against tenant-caused damage. Renters have the option of purchasing renters insurance through an online portal to protect their personal belongings, as well as the property itself, from certain unexpected damages.

Our **Maintenance Contact Center** is built into our customers APM maintenance workflow and is staffed 24/7/365 by trained agents, each acting as an extension of our property management customers' teams to resolve or route incoming maintenance requests. Contact center agents are able to enter non-emergency work orders directly into APM's property maintenance software for a property manager's approval, and to dispatch vendors immediately in case of an emergency.

Premium Leads allow customers to upgrade property listings to premium status and syndicate them to dozens of pay-to-list websites, including featured placement on many sites. Customers also receive advance call tracking and pay only for the verified leads they receive through the Value+ service.

With **Tenant Debt Collections**, our customers can electronically send past due tenant debt from their APM database to a national fully-licensed third party debt collection agency to attempt to recover uncollected revenue. This Value+ service also includes reporting unpaid balances to three major credit bureaus.

With **Utility Management**, our customers are able to automate utility bill processing and resident billing, and manage utility-related operating and capital expenditures.

Our **AI Leasing Assistant**, Lisa, works 24/7 as part of the leasing team to provide tailored text message or email responses to prospective renters in real-time, and leverages integrated reporting to track leasing performance with accurate data to drive increased occupancy rates and operational efficiency.

AppFolio Investment Management - Core Solution

AppFolio Investment Management is a cloud-based software solution for real estate investment managers of various sizes providing innovative tools and services designed to streamline their real estate investment management businesses. Core functionality addresses key operational issues, including management of investor relationships by increasing transparency and streamlining communications with key stakeholders.

Seasonality in Real Estate

We experience limited seasonality in our Value+ services revenue, primarily with respect to certain leasing-related services we provide to our property management customers, including our tenant screening services and new tenant applications which

impact electronic payment services revenue. Our property management customers historically have processed fewer applications for new tenants during the fourth quarter. As a result of this seasonal decline in activity, we have typically experienced overall slower sequential revenue growth or a sequential decline in revenue in the fourth quarter of each of our most recent fiscal years. We expect this seasonality to continue in the foreseeable future.

Legal Market

We entered the legal market with the acquisition of MyCase in 2012. In 2013, we introduced website design and hosting services, our first Value+ service for our legal market customers, designed to assist small law firms with the marketing of their practices, electronic storage of case information and communications. In 2016, we launched electronic payments services for the legal market, which streamlined the billing and receivables process through MyCase. Similar to our offerings in the real estate market, our software solutions and Value+ services in the legal market are subject to strict legal, regulatory and other requirements. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

Our Legal Solutions

MyCase - Core Solution

MyCase is a cloud-based software solution for the legal market that provides small law firms innovative tools and services designed to streamline their legal practice and manage their caseload. MyCase core functionality addresses key operational issues, including managing calendars, contacts and documents, time tracking, billing and collections, communicating with clients and securely sharing sensitive and privileged materials. MyCase is continuously evolving to help our customers more effectively market, manage and grow their firms.

MyCase - Value+ Services

In addition to our core solution for MyCase, we offer the following optional Value+ services to our legal customers.

We deliver and maintain professionally designed and architected **Websites** that practitioners and their clients can utilize to access case and matter information, communicate internally and externally, and manage bills. Our websites are fully-integrated with the MyCase platform and designed to improve the effectiveness of law firm marketing, streamline daily business tasks, and increase mobile presence.

Our **Electronic Payment Services** allow practitioners to streamline billing and receivables online. Our customers can quickly and conveniently bill their clients and receive payments electronically through MyCase's secure online portal.

Our Customers

We define our customer base as the number of customers paying for subscriptions to our core solutions. No individual customer represented 10% or more of our total revenue for fiscal 2019.

Over 90% of our annual revenue is derived from the software solutions, services and data analytics we offer to the real estate market. The significant majority of our customers in the real estate market use our property management solutions. As of December 31, 2019, we had 14,385 property management customers.

As of December 31, 2019, we also had 10,971 small law firm customers that directly and indirectly account for less than 10% of our annual revenue.

Sales and Marketing

We leverage a modern and scalable marketing approach along with marketing automation technology to attract and engage prospects, build brand recognition and our reputation as an industry leader. We participate in and drive industry thought leadership and education with both online and offline activities, and we use a variety of inbound and outbound marketing techniques to promote our business software solutions, services and data analytics.

Our real estate business development team acts in partnership with our marketing and sales teams to reach potential customers and generate sales opportunities and speed the time from evaluation to close. Our real estate sales representatives assist prospective customers as they evaluate our software solutions. Our interactive sales methodology allows our sales team to quickly build relationships, assess our customers' business challenges, and demonstrate the benefits of our core functionality and Value+

services. Throughout the customer relationship, we continue to promote adoption and usage of our Value+ services through a variety of channels, including email, webinars, training, sales outreach and from within our software solution via in-app messaging. As we serve larger and more complex real estate customers, we have invested in additional headcount to manage and grow these customer relationships over time.

Prospective law firm customers either sign up for a free trial on a self-service basis or speak to our business development representatives or legal sales representatives as they evaluate our software solutions.

Customer Service

Our success is based on long-term customer retention, not a one-time sale, and we partner with our customers throughout the life of our relationship. We design our software solutions to be simple and easy to implement, use and manage, and offer unlimited training and support at no extra charge. We pride ourselves on being customer-centric and strive to educate our customers on the core functionality and Value+ services they can use to improve business efficiency and productivity.

Our onboarding team strives to ensure that customers are prepared to run their businesses on our platform and provide a seamless onboarding experience. As a result of our assistance with data migration matters, we are able to provide valuable insights into data integrity and work with our customers to help resolve any issues in their underlying business processes. We also assist our customers with the configuration of our platform for particular property types or cases, as appropriate. We provide a dedicated team throughout the onboarding process and beyond, and we share insights on best practices in both of our targeted verticals. In addition, certain team members are focused on guiding our customers through the adoption and utilization of our Value+ services.

Technology and Operations

Data Security and Availability

We use Ruby-on-Rails as our primary web application framework . We take great care to keep these application frameworks and the rest of our software stack current in order to mitigate known security vulnerabilities. Our software solutions run on a combination of both public and private cloud infrastructure across five distinct geographic U.S. regions, consisting of both our own servers and Amazon's Elastic Compute Cloud platform. Our servers are located in state-of-the-art data centers operated by third-party service providers, including Amazon Web Services. Physical security at these facilities includes a variety of access controls, including electronic keycards, pin codes, biometric hand scans and mantraps, and policing by high resolution, motion sensitive video surveillance. These facilities provide redundant power and a system of heating, ventilating and air conditioning, as well as fire-threat detection and suppression. In order to ensure that no data is ever lost and that customer requests can be satisfied, production assets are securely backed up to external environments.

Our operators monitor our systems to ensure high performance and availability and our architecture allows our operators significant flexibility in achieving these goals. In particular, our operators have fine-grained control over the specific server and region on which each customer's data resides, and can easily move customer data between five geographic regions in order to avoid service disruption or to increase service performance.

Sensitive customer data is encrypted during transmission and before being written to disk, including passwords, Social Security, and tax identification numbers. We regularly evaluate our Internet security, including through third-party penetration testing. In addition, our software solutions allow our customers to define roles that provide different levels of access to users, allowing them to view and modify specific items depending on their role. Supervisors can distribute work to on-site staff in a secure and controlled environment, while leadership retains visibility across the entire system. Our customers may also elect to further secure their account through two-factor authentication. Notwithstanding the foregoing, there can be no assurance that the significant data security measures we employ will prevent malicious or unauthorized access to our systems and information. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

Research and Product Development

We entrust product design, development and testing to our team of engineers, who coordinate closely with our product management team to launch core functionality, products and Value+ services. Our engineers are organized in small teams to foster agility and continued innovation in responding to the evolving needs of our customers. We leverage a collaborative, team-based and test-driven approach to engineering in order to release new functionality frequently. We believe that it is easier for our customers to adjust to continuous updates to our software solutions, which incrementally change and improve their user experience, than it is to adapt to infrequent, but more drastic upgrades.

We rely heavily on input from our customers and prospective customers in developing products that meet their needs and in anticipating developments in their respective industries. Our product management team leads our research and market validation efforts and provides guidance to management and our engineering team based on our collective domain expertise and in-depth knowledge and understanding of our customers. As a result, our product management team engages regularly with customers, partners, and other industry participants, as well as our customer service and sales and marketing organizations. Our product management team manages our development projects generally and serves to align separate functions within the company with a single strategic vision. Nevertheless, the software industry in general, and our targeted markets in particular, are characterized by rapid technological advances, changing industry standards, evolving customer requirements and intense competition, and we cannot be certain that our research and product development strategies will be successful in each and every market we serve. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

Our Culture and Employees

We believe our people are at the heart of our success and our customers' success, and we have worked hard not only to attract and hire quality individuals but also to nurture and develop our valuable human resources. We believe in the strong team we have cultivated, particularly in our deep bench of leaders who continue to execute our strategic plans and encourage innovation across the organization. We further believe that our company culture, driven by a dedication to the following six core values, provides us with a significant competitive advantage:

- Simpler Is Better
- Great, Innovative Products Are Key To A Great Business
- Great People Make A Great Company
- Listening To Customers Is In Our DNA
- Small, Focused Teams Keep Us Agile
- We Do The Right Thing Because It's Good For Business

By recruiting people who are inspired by these values, focusing on building an outstanding culture and offering opportunities for professional and personal growth, AppFolio has been recognized as a Best Place to Work by Glassdoor 2020 and honored by Great Place to Work as Best Workplace for Women and Parents, Best Place to Work in Texas, and Best Small & Medium Workplace for 2019.

At December 31, 2019, we had 1,240 employees, and we consider our relationship with them to be very good. We also hire temporary employees and consultants, and we feel similarly about our relationships with them. None of our employees is represented by a labor union or covered by a collective bargaining agreement. We must continue to attract and retain highly qualified and motivated personnel across our organization to execute our growth plan and achieve our strategic objectives. If we fail to do so, our business and operating results may suffer. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

Our Growth Strategy

We have managed, and plan to continue to manage, our business towards the achievement of long-term growth that we believe will positively impact long-term stockholder value, rather than the realization of short-term financial or business metrics, or short-term stockholder value. Our growth strategy is to provide increasingly valuable business management software solutions, services and analytics to our customers and their key stakeholders. The technology surrounding business management software solutions, services and analytics are constantly evolving, and our growth strategy is thus subject to a variety of risks and uncertainties. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues. Notwithstanding those risks and uncertainties, key components of our growth strategy include:

Maintain Product and Technology Leadership. We have made, and will continue to make, significant investments in research and new product development to expand our software solutions, services and data analytics capabilities as we deem appropriate in our target markets. We intend to continue using our market validation techniques and close relationships with our customers as a key source of feedback to inform and direct our product roadmap. We may also choose to acquire rather than build certain technology solutions, or to partner with third parties to deliver key functionality to serve our existing or prospective customers.

Keep Our Existing Customers Happy. We believe customer success is essential to our long-term success. We place significant emphasis on close relationships with our customers and on customer service to differentiate our software

solutions from competing products. This emphasis will continue to be a critical component of our business strategy in the future. We believe that maintaining our focus on our customers will drive product innovation, leading to greater adoption and utilization of our software solutions over time.

Expand Adoption and Use By Existing Customers. We have made, and will continue to make, significant investments that expand our core functionality and/or add new Value+ services to meet the current and evolving needs and requirements of our customers and their key stakeholders. We expect our customers will continue to use our technology to manage their businesses and increasingly adopt and use additional Value+ services.

Acquire New Customers. We expect to grow our customer base with our sales and marketing programs, including evolving industry thought leadership and education, and the referral power of satisfied customers.

Enter New Adjacent Markets. We expect to continue to evaluate and expand into adjacent markets based on our market validation strategy and target customer feedback in a manner consistent with our strategic plan. We believe that, while we are continuously developing our software solutions within one market, we can apply certain relevant product enhancements and learnings from that market as we extend our platform into each successive adjacent market.

Expand into New Verticals. We expect to continue to review potential opportunities to expand into additional vertical markets in a manner consistent with our strategic plan. Any new vertical must also fit within our overall business strategy, including our management team's assessment of available alternatives, such as the number and size of potential adjacent market opportunities, and the relative risk and return of these opportunities.

Competition

The overall market for business management software is global, highly competitive and continually evolving to respond to changes in technology, operational requirements, and ever-changing laws and regulations. We believe our competitors primarily fall into the following categories:

- On-premise or cloud-based vertical market business management software providers that serve companies of all sizes in our markets; and
- On-premise or cloud-based horizontal business management software providers that offer broad solutions across multiple verticals.

We also see competition from numerous cloud-based solutions providers that focus almost exclusively on one or more point solutions. For example, in the real estate vertical, we compete with payment solutions providers, listing services, tenant screening applications and specialists in lease forms. In the legal vertical, we compete with time tracking, legal billing and payment services. Continued consolidation among cloud-based solution providers could lead to significantly increased competition.

We believe the principal competitive factors in each of our vertical markets include the following:

- breadth and depth of functionality in software solutions and applications;
- brand awareness and reputation;
- ease of deployment and use of software solutions and applications;
- level of customer satisfaction;
- data security and availability;
- nature and extent of mobile interface;
- size of customer base and level of user adoption and usage;
- total cost of ownership;
- ability to innovate and respond to customer needs rapidly;
- domain expertise with respect to our targeted verticals; and
- ability to leverage a common technology platform and business strategy.

We believe that we compete favorably on the factors described above. However, some of our competitors may have greater financial, technical and other resources, greater name recognition and larger sales and marketing budgets; therefore, we may not always compare favorably with respect to some or all of the foregoing factors.

Intellectual Property

We rely on a combination of patents, copyrights, trademarks, trade secrets, confidentiality procedures and contractual restrictions to establish and protect our proprietary rights in our core solutions and Value+ services. At January 31, 2020, we had twelve issued United States patents that directly relate to our technology and expire between 2026 and 2033. We may pursue additional patent protection to the extent we believe it would be beneficial and cost effective.

We have registered "AppFolio" and "MyCase" and certain other marks as trademarks in the United States and several other jurisdictions. We have also acquired certain marks and filed trademark applications and renewals in the United States and certain other jurisdictions, and will pursue additional trademark registrations to the extent we believe it would be beneficial and cost effective. We are the registered holder of a variety of domestic and international domain names that include "appfolioinc.com," "appfolio.com," "mycase.com" and similar variations. We also license software from third parties for use in our solutions, including open source software and other software available on standard commercial terms.

We control access to our proprietary technology by entering into confidentiality and invention assignment agreements with our employees and contractors, and confidentiality agreements with third parties. Despite our precautions, it may be possible for unauthorized third parties to copy our software solutions and use information that we regard as proprietary to create products and services that compete with ours.

Corporate Information

We were formed in 2006 as a Delaware limited liability company and converted to a Delaware corporation in 2007. Our principal executive offices are located at 50 Castilian Drive, Santa Barbara, California 93117, and our telephone number is (805) 364-6093. Our corporate website is www.appfolioinc.com. The information contained on or accessed through our website does not constitute part of, and is not incorporated by reference into this Annual Report. References to our website address in this Annual Report are inactive textual references only.

"AppFolio," "MyCase," the AppFolio logo, the MyCase logo, and other trademarks and trade names of AppFolio and MyCase appearing in this Annual Report are our property. All other trademarks or trade names appearing in this report are the property of their respective owners. Solely for convenience, the trademarks and trade names in this report are referred to without the ® and ™ symbols. We do not intend our use or display of the trademarks, trade names or service marks of other parties to imply a relationship with, or endorsement or sponsorship of us, by such other parties.

Available Information

We file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, as well as amendments to those reports pursuant to Sections 13(a) and 15(d) of the Exchange Act. We also file proxy statements and information statements pursuant to Section 14 of the Exchange Act. The SEC maintains a website at www.sec.gov that contains the reports, proxy and information statements, and other information that we file with or furnish to the SEC electronically. Copies of the reports, proxy statements and other information may also be obtained, free of charge, electronically through our corporate website, at www.appfolioinc.com, as soon as reasonably practical after we file such material with, or furnish it to, the SEC.

ITEM 1A. RISK FACTORS

An investment in our Class A common stock involves risks. You should consider carefully the risks and uncertainties described below, together with all of the other information included in this Annual Report, as well as in our other filings with the SEC, in evaluating our business. If any of the following risks actually occur, our business, financial condition, operating results and future prospects could be materially and adversely affected. In that case, the trading price of our Class A common stock may decline and you might lose all or part of your investment. The risks described below are not the only ones we face. Additional risks that we currently do not know about or that we currently believe to be immaterial may also impair our business, financial condition, operating results and prospects.

Please be advised that certain of the risks and uncertainties described below contain "forward-looking statements." See the section of this Annual Report entitled "Cautionary Note Regarding Forward-Looking Statements" for additional information.

Risks Related to Our Business and Our Industry

We manage our business towards the achievement of long-term growth, which may not be consistent with the short-term expectations of some investors.

We plan to continue to manage our business towards the achievement of long-term growth that we believe will positively impact long-term stockholder value, and not towards the realization of short-term financial or business metrics, or short-term stockholder value. If opportunities arise that might cause us to sacrifice our performance with respect to short-term financial or business metrics, but that we believe are in the best interests of our stockholders, we will take those opportunities.

We focus on growing our customer base by launching new and innovative core functionality and/or Value+ services to address our customers' evolving business needs, developing and/or acquiring new products for adjacent markets and additional verticals consistent with our strategic plan, and improving the experience of our users across our targeted verticals. We prioritize product innovation and user experience over short-term financial or business metrics. We will make product decisions that may reduce our short-term operating results if we believe that these decisions are consistent with our strategic objective to achieve long-term growth. These decisions may not be consistent with the short-term expectations of some investors, and may cause significant fluctuations in our operating results from period to period. In addition, notwithstanding our intention to make strategic decisions that positively impact long-term stockholder value, the decisions we make may not produce the long-term benefits we expect.

Our executive officers, directors and principal stockholders control a majority of the combined voting power of our outstanding capital stock. As a result, they are able to exercise significant influence and control over the establishment and implementation of our future business plans and strategic objectives, as well as control all matters submitted to our stockholders for approval. These persons may manage our business in ways with which you disagree and which may be adverse to your interests.

If we fail to manage our growth effectively, it could adversely affect our operating results and preclude us from achieving our strategic objectives.

We have experienced significant growth since our formation in 2006, and we anticipate that we will continue to experience growth and expansion of our operations. This growth in the size, complexity and diversity of our business has placed, and we expect it will continue to place, a significant strain on our management, administrative, operational and financial resources, as well as our company culture. Our future success will depend, in part, on our ability to manage this growth effectively. To manage the expected growth of our operations, we will need to continue to develop and improve our operational and financial controls and our reporting systems and procedures, continue to attract and retain highly qualified and motivated personnel across our organization, and continue to nurture and build on our company culture. Failure to effectively manage growth could adversely impact our business, including by resulting in errors or delays in deploying new core functionality to our customers, delays or difficulties in introducing new Value+ services or other products consistent with our strategic plan, declines in the quality or responsiveness of our customer service organization, exposure to legal, regulatory and operational risks inherent in our existing business and in any new products or services we provide to our customers or to our customers' customers, increases in costs and operating expenses, and other operational difficulties. We expect these risks will only be increased as a result of any future products or services we develop and bring to market, as well as acquisitions or adjacent markets we may pursue. If any of these risks actually occur, it could adversely affect our operating results, and preclude us from achieving our strategic objectives.

We have a limited operating history and limited experience selling our solutions. We expect to make substantial investments across our organization to grow our business and, as a result, we expect our financial results may fluctuate significantly from period to period and we may not sustain profitability.

We were formed in 2006 and in 2008 entered the real estate vertical with our first product, APM, to serve property managers. We expanded our real estate offerings with the launch of APM PLUS in late 2018 and AppFolio Investment Management in April 2019. In 2012, we entered the legal vertical through the acquisition of MyCase, which represents less than 10% of our total revenue for fiscal 2019. As a result, we have a limited operating history and limited experience selling our software solutions, which are constantly changing and evolving, in two dynamic vertical markets. These and other factors combine to make it more difficult for us to accurately forecast our future operating results, which in turn makes it more difficult for us to prepare accurate budgets and implement strategic plans. We expect that this uncertainty will continue to exist in our business for the foreseeable future, and will be exacerbated to the extent we introduce new functionality, or enter adjacent markets or new verticals consistent with our strategic plan, or complete additional acquisitions.

We have made substantial investments across our organization to develop our software solutions and capitalize on our market opportunity. In order to implement our business strategy, we intend to continue to make substantial investments in, among other things:

- our research and product development organization to enhance the ease of use and functionality of our software solutions by adding new core functionality, Value+ services and/or other improvements to address the evolving

- needs of our customers, as well as to develop new products for adjacent markets and new verticals consistent with our strategic plan;
- our continued efforts to identify acquisition targets that enhance the depth or functionality of our software solutions or Value+ services, or that enable our expansion into adjacent markets or new vertical markets consistent with our strategic plan;
- our customer service organization to deepen our relationships with our customers, assist our customers in achieving success through the use of our software solutions, and promote customer retention;
- our sales and marketing organization, including expansion of our direct sales organization and marketing programs, to increase the size of our customer base, increase adoption and utilization of new and existing Value+ services by our new and existing customers, and enter adjacent markets and new vertical consistent with our strategic plan;
- maintaining and expanding our technology infrastructure and operational support to promote the security and availability of our software solutions, and support our growth;
- our general and administrative functions, including hiring additional finance, IT, human resources, legal, compliance and administrative personnel, to support our growth and assist us in achieving and maintaining compliance with public company reporting and legal, regulatory and other compliance-related obligations; and
- the expansion of our existing facilities, including leasing and building out additional office space, to support our growth and strategic development.

As a result of our continuing investments to grow our business in these and other areas, we expect our expenses to increase significantly, and we may not be consistently profitable. Even if we are successful in growing our customer base and increasing revenue from new and existing customers, we may not be able to generate additional revenue in an amount that is sufficient to cover our expenses. We may incur significant losses in a particular period for a number of reasons, and may experience significant fluctuations in our operating results from period to period, including as a result of the other risks and uncertainties described elsewhere in this Annual Report. We cannot assure you that we will continue to achieve profitability in the near term or that we will sustain profitability on a sequential quarterly basis or over any particular period of time. Any additional operating losses will have a negative impact on our stockholders' equity.

Our quarterly results may fluctuate significantly and period-to-period comparisons of our results may not be meaningful.

Our quarterly results, including the levels of our revenue, costs, operating expenses, and operating margins, may fluctuate significantly in the future, and period-to-period comparisons of our results may not be meaningful. Accordingly, the results of any one quarter should not be relied upon as an indication of our future performance. In addition, our quarterly results may not fully reflect the underlying performance of our business. Factors that may cause fluctuations in our quarterly results include, but are not limited to:

- our ability to retain our existing customers, and to expand adoption and utilization of our core solutions and Value+ services by our existing customers;
- our ability to attract new customers, the type of customers we are able to attract, the size and needs of their businesses, and the cost of acquiring these customers;
- the mix of our core solutions and Value+ services sold during the period;
- the timing and impact of security breaches, service outages or other performance problems with our technology infrastructure and software solutions;
- variations in the timing of sales of our core solutions and Value+ services as a result of trends impacting the verticals in which we sell our software solutions;
- the timing and market acceptance of new core functionality, Value+ services and other products introduced by us and our competitors;
- changes in our pricing policies or those of our competitors;
- the timing of our recognition of revenue;

- the amount and timing of costs and operating expenses related to the maintenance and expansion of our business, infrastructure and operations;
- the amount and timing of costs and operating expenses associated with assessing or entering adjacent markets or new verticals;
- the amount and timing of costs and operating expenses related to the development or acquisition of businesses, services, technologies or intellectual property rights, and potential future charges for impairment of goodwill from these acquisitions;
- the timing and costs associated with legal proceedings, enforcement actions, regulatory inquiries or similar matters;
- changes in the competitive dynamics of our industry, including consolidation among competitors, strategic partners or customers;
- loss of our executive officers or other key employees;
- industry conditions and trends that are specific to the verticals in which we sell or intend to sell our software solutions; and
- general economic and market conditions.

Our focus on managing our business towards the achievement of long-term growth, rather than the realization of short-term financial or business metrics, may serve to exacerbate the fluctuations in our quarterly results, which could result in downward pressure on the market price of our Class A common stock. In addition, fluctuations in quarterly results may negatively impact the value of our Class A common stock, regardless of whether they impact or reflect the overall performance of our business. Furthermore, if our quarterly results fall below the expectations of investors or any securities analysts who follow our stock, or below any financial guidance we may provide, the price of our Class A common stock could decline substantially.

We may require additional capital to support our operations or the growth of our business, and we cannot be certain that this capital will be available on favorable terms, or at all, when required, which may adversely affect our financial condition and, therefore, our business.

We may need additional capital to grow our business and meet our strategic objectives. Our ability to obtain additional capital, if and when required, will depend on numerous factors, including investor and lender demand, our historical and forecasted financial and operating performance, our market position, and the overall condition of the capital markets. We cannot guarantee that additional financing will be available to us on favorable terms when required, or at all. In addition, if we raise additional funds through the issuance of equity securities, those securities may have powers, preferences or rights senior to the rights of our Class A common stock, and our existing stockholders may experience immediate dilution. If we raise additional funds through the issuance of debt securities, we may incur interest expense or other costs to service the indebtedness, we may be required to encumber certain assets, and we may become subject to restrictions on our ability to conduct business, any of which could negatively impact our operating results. Furthermore, if we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support the growth of our business and the achievement of our strategic objectives could be significantly impaired and our operating results may be harmed.

Our estimates of market opportunity are subject to significant uncertainty and, even if the markets in which we compete meet or exceed our size estimates, we could fail to increase our revenue or market share.

Market opportunity estimates are subject to significant uncertainty and are based on assumptions and estimates, including our internal analysis and industry experience. Assessing the market for industry-specific, cloud-based business management software is particularly difficult due to a number of factors, including limited available information and rapid evolution of the market. Further, market opportunity estimates sometimes change based on relevant macro-trends and market conditions, or evolving assessment methodologies. We determine the level of our investment in various aspects of the business, in part, based on our market opportunity estimates. If we had made different assumptions, our estimates of market opportunity, and/or our related investment determinations, could be materially different.

In addition, even if the markets in which we compete meet or exceed our size estimates, our software solutions could fail to gain market acceptance and our business may not grow in line with our forecasts, or at all, which would have a material adverse impact on our financial condition and operating results.

We have acquired, and may in the future acquire, other companies or technologies, which could divert our management's attention, result in additional dilution to our stockholders and otherwise disrupt our operations.

We have acquired, and may in the future acquire, other companies or technologies to complement or expand our software solutions, optimize our technical capabilities, enhance our ability to compete in our targeted verticals, provide an opportunity to expand into an adjacent market or new vertical, or otherwise offer growth or strategic opportunities. For example, in our real estate vertical, we acquired substantially all of the assets of WegoWise in 2018 and completed the acquisition of Dynasty in 2019. The pursuit of acquisitions may divert the attention of management and cause us to incur various expenses in identifying, investigating and pursuing suitable acquisitions, whether or not they are consummated.

We have limited experience acquiring other businesses. We may not be able to integrate acquired assets, technologies, personnel and operations successfully or achieve the anticipated synergies or other benefits from the acquired business due to a number of risks associated with acquisitions, including:

- the aggregate cost, whether in cash or equity securities, to acquire the business;
- difficulties integrating the assets, technologies, personnel or operations of the acquired business in a cost-effective manner;
- difficulties and additional expenses associated with supporting legacy products and services of the acquired business;
- difficulties converting the customers of the acquired business to our software solutions and contract terms;
- diversion of management's attention from our business to address acquisition and integration challenges, as well as post-acquisition disputes;
- adverse effects on our existing business relationships with customers and strategic partners as a result of the acquisition;
- cultural challenges associated with integrating employees from the acquired organization into our company;
- the loss of key employees;
- use of resources that are needed in other parts of our business;
- costs associated with and exposure to new or enhanced legal, regulatory or other compliance-based and/or operational risks implicit in the acquired business;
- use of substantial portions of our available cash resources to consummate the acquisition or pay acquisition-related expenses; and
- unanticipated costs or liabilities associated with the acquisition.

If an acquisition fails to meet our expectations in terms of its contribution to our overall business strategy or operating results, or if the costs of acquiring or integrating the acquired business exceed our estimates, our business, operating results and financial condition may suffer. In addition, acquisitions could result in the issuance of equity securities, which would result in immediate dilution to our stockholders or, the incurrence of debt, which could impose debt service obligations and restrictions on our ability to operate our business. Furthermore, a significant portion of the purchase price of companies we may acquire could be allocated to goodwill and other intangible assets, which must be assessed for impairment. In the future, if our acquisitions do not yield expected returns, we may be required to take charges to our operating results based on this impairment assessment process, which could adversely affect our operating results.

Security vulnerabilities in our software solutions or a breach of our security controls could result in the loss, theft, misuse, unauthorized disclosure, or unauthorized access to customer or employee data, or other confidential and sensitive information, which could harm our relationships with customers or employees, expose us to litigation or regulatory proceedings, or harm our reputation, any of which could materially harm our business and operating results.

Our business involves the storage and transmission of a significant amount of confidential and sensitive information, including the personal information of our employees and other individuals, customer data, and our proprietary financial, operational and strategic information. In providing our software solutions, we store and transmit large amounts of our customers' data, including sensitive and proprietary data and personal information collected by or on behalf of our customers. Our software solutions are

typically the system of record, system of engagement and, increasingly, the system of intelligence for all or a portion of our customers' businesses, and the data processed through our software solutions is critical to their businesses. Cyber attacks and other malicious Internet-based activities continue on a regular basis, as evidenced by the recent targeting of a number of high profile companies and organizations. Like many other businesses, we have experienced, and are continually at risk of being subject to, attacks and data security incidents. As our business grows, the number of users of our software solutions, as well as the amount of information we collect and store, is increasing, and our brands are becoming more widely recognized. We believe these factors combine to make us an even greater target for this type of malicious activity. Although we take data security seriously, there can be no assurance that the security measures we employ will prevent malicious or unauthorized access to our systems and information. Techniques used to sabotage, or to obtain unauthorized access to, systems or networks change frequently and may not be recognized until launched against a target. Furthermore, no security program can eliminate entirely the risk of non-malicious human error, such as an employee or contractor's failure to follow one or more security protocols. Therefore, despite our significant efforts to keep our systems and networks protected and up to date, we may be unable to anticipate cyber attacks, detect security incidents or react to them in a timely manner, or implement adequate preventive measures, any of which may expose us to a risk of loss, litigation and potential liability. In addition, some of our third-party service providers also collect and/or store our sensitive information and our customers' data on our behalf, and these service providers are subject to similar threats of cyber attacks and other malicious Internet-based activities.

If our security measures, or the security measures of our third-party service providers, are breached as a result of wrongdoing or malicious activity on the part of our employees, our partners' employees, our customers' employees, or any third party, or as a result of any human error or neglect, product defect or otherwise, and this results in the loss, theft, misuse, unauthorized disclosure, or unauthorized access to customer data or other sensitive information, we could incur liability to our customers and to individuals or organizations whose information was being stored by us or our customers, as well as, for example, fines from payment processing networks and/or regulatory action by governmental bodies. If we experience a widespread security breach, we cannot be certain that our insurance coverage will be sufficient to compensate us for liabilities actually incurred or that insurance will continue to be available to us on reasonable terms, or at all. In addition, any security breaches could result in reputational damage, adversely affect our ability to attract new customers and cause existing customers to reduce or discontinue the use of our software solutions, any of which could harm our business and operating results. Furthermore, the perception by our current or potential customers that our software solutions could be vulnerable to exploitation or that our security measures are inadequate, even in the absence of a particular problem or threat, could reduce market acceptance of our software solutions and cause us to lose customers. The legal and regulatory environment around data security and governance is significantly evolving and tightening, and both regulators and consumers are increasingly taking action on data-related matters, which may contribute to increased reputational, economic and other harm in the event of a data security incident.

Service outages due to malicious activities or performance problems associated with our technology infrastructure could harm our reputation, adversely affect our ability to attract new customers and cause us to lose existing customers.

We have experienced significant growth in the number of users and the amount of data that our technology infrastructure supports, and we expect this growth to continue. We seek to maintain sufficient excess capacity in our technology infrastructure to meet the needs of all of our customers, including to facilitate the expansion of existing customer deployments and the provisioning of new customer deployments. In addition, we need to properly manage our technology infrastructure in order to support version control, changes in hardware and software parameters, and the evolution of our software solutions.

We have experienced, and may in the future experience, website disruptions, service outages and other performance problems with our technology infrastructure. These problems may be caused by a variety of factors, including infrastructure changes, power or network outages, fire, flood or other natural disasters affecting our data centers, human or software errors, viruses, security breaches, fraud or other malicious activity, spikes in customer usage and distributed denial of service attacks. In some instances, we may not be able to identify the cause or causes of these service outages and performance problems within an acceptable period of time. If our technology infrastructure fails to keep pace with the increased number of users and amount of data, or if we are unable to avoid service outages and performance problems, or to resolve them quickly, this could adversely affect our ability to attract new customers, result in the loss of existing customers and harm our reputation, any or all of which could adversely affect our business and operating results.

Errors, defects or other disruptions in our software solutions could harm our reputation, cause us to lose customers, and result in significant expenditures to correct the problem.

Our customers use our software solutions to manage critical aspects of their businesses, and any errors, defects or other disruptions in the performance of our software solutions, including with respect to third party partners upon which certain of our software solutions are dependent, may result in loss of or damage to our customers' data and disruption to our customers' businesses, which could harm our reputation. We provide continuous updates to our software solutions and, while our software updates undergo

extensive testing prior to their release, these updates may contain undetected errors when first introduced. In the past, we have discovered errors, failures, vulnerabilities and bugs in our software updates after they have been released, and similar problems may arise in the future. Real or perceived errors, failures, vulnerabilities or bugs in our software solutions could result in negative publicity, reputational harm, loss of customers, delay in market acceptance of our software solutions, loss of competitive position, withholding or delay of payment to us, claims by customers for losses sustained by them and potential litigation or regulatory action. In any such event, we may be required to expend additional resources in order to help correct the problem or, in order to address customer service or reputational concerns, we may choose to expend additional resources to take corrective action even where not required. The costs incurred in correcting any material errors, defects or other disruptions could be substantial and there may not be any corresponding increase in revenue to offset these costs. In addition, we may not carry insurance sufficient to compensate us for any losses that may result from claims arising from errors, defects or other disruptions in our software solutions.

Government regulation is evolving and unfavorable changes could adversely affect our operating results, subject us to litigation or governmental investigation, or otherwise harm our business.

We are subject to general business regulations and laws, as well as regulations and laws specifically governing the highly regulated real estate and legal markets, electronic payment, background screening and insurance services markets, the Internet itself, the use of mobile devices to conduct business and communicate, and many other products and services we provide. Existing and future laws and regulations may impede our growth. These regulations and laws may cover privacy, data protection, artificial intelligence and related technologies, pricing, content, intellectual property, mobile communications, electronic contracts and other communications, competition, consumer protection, employment, trade and protectionist measures, web services, the provision of online payment and tenant screening services, information reporting requirements, unencumbered Internet access to our products or services, and the design and operation of websites. It is not clear how existing laws governing issues such as property ownership, management, rental and investment, data protection, and personal privacy apply to the Internet, digital content, web services, and artificial intelligence technologies and services. Unfavorable regulations, laws, and administrative or judicial decisions interpreting or applying those laws and regulations could diminish the demand for, or availability of, our products and services, subject us to litigation or governmental investigation and increase our cost of doing business, any of which may adversely affect our operating results.

Privacy and data security laws and regulations could impose additional costs on us and reduce the demand for our software solutions.

We store and transmit personal information relating to our employees and other individuals, and our customers use our technology platform to store and transmit a significant amount of personal information relating to their clients, vendors, employees and other industry participants. Privacy and data security have become significant issues in the United States and in other jurisdictions where we may operate or offer our software solutions. The regulatory framework relating to privacy and data security worldwide is rapidly evolving and tightening, and is likely to remain uncertain for the foreseeable future. Federal, state and foreign government bodies and agencies have in the past adopted, and may in the future adopt, laws and regulations regarding the collection, use, processing, storage and disclosure of personal or identifying information obtained from customers and other individuals. For instance, the California Consumer Privacy Act, which went into effect on January 1, 2020, creates new data privacy and security rights for California residents. Similarly, there are a number of existing and proposed laws and regulations in the European Union and the United States at both the federal and state level, as well as other jurisdictions that could impose new obligations in areas affecting our business. These new obligations could increase the cost and complexity of delivering our services, and divert our management's attention from pursuing strategic objectives.

In addition to government regulation, privacy advocates and industry groups may propose various self-regulatory standards that may legally or contractually apply to our business. Because the interpretation and application of many privacy and data security laws, regulations and applicable industry standards are uncertain, it is possible that these laws, regulations and standards may be interpreted and applied in a manner inconsistent with our existing privacy and data management practices. As new laws, regulations and industry standards take effect, and as we expand into new jurisdictions, adjacent markets or verticals consistent with our strategic plan, we will need to understand and comply with various new requirements, which may result in significant additional costs.

To the extent applicable to our business or the businesses of our customers, these laws, regulations and industry standards could have negative effects on our business, including by increasing our costs and operating expenses, and/or delaying or impeding our deployment of new or existing core functionality or Value+ services. Compliance with these laws, regulations and industry standards requires significant management time and attention, and failure to comply could result in negative publicity, subject us to fines or penalties, expose us to litigation, or result in demands that we modify or cease existing business practices. In addition, the costs of compliance with, and other burdens imposed by, such laws, regulations and industry standards may adversely affect our customers' ability or desire to collect, use, process and store personal information using our software solutions, which could

reduce overall demand for them. Even the perception of privacy and data security concerns, whether or not valid, may inhibit market acceptance of our software solutions. Furthermore, privacy and data security concerns may cause our customers' clients, vendors, employees and other industry participants to resist providing the personal information necessary to allow our customers to use our applications effectively. Any of these outcomes could adversely affect our business and operating results.

We face a number of risks in our electronic payment services business that could adversely affect our business or operating results.

In our electronic payments services business, we facilitate the processing of both inbound and outbound payments for our customers. These payments are settled through our sponsoring clearing bank, card payment processors, and other third-party electronic payment services providers that we may contract with from time to time. Our electronic payment services subject us to a number of risks, including, but not limited to:

- liability for customer costs related to disputed or fraudulent transactions if those costs exceed the amount of the customer reserves we have, if any, during the clearing period or after payments have been settled to our customers;
- electronic processing limits on the amounts that any single electronic payment services provider, or collectively all of our electronic payment services providers, will underwrite;
- our reliance on sponsoring clearing banks, card payment processors and other electronic payment providers to process electronic transactions;
- failure by us, our electronic payment services providers or our customers to adhere to applicable laws, regulations and standards that apply to the provision of electronic payment services;
- continually evolving laws and regulations governing money transmission and anti-money laundering, the application or interpretation of which is not clear in some jurisdictions;
- incidences of fraud in our electronic payment services ecosystem, security breaches, errors, defects, failures, vulnerabilities or bugs in our electronic payment services business, or our failure to comply with required external audit standards; and
- our inability to increase our fees as the business evolves in a sufficient amount to maintain our existing margins.

If any of these risks related to our electronic payment services were to materialize, our business or operating results could be negatively affected. Although we attempt to structure and adapt our electronic payment services to comply with complex and evolving laws, regulations and standards, our underwriting efforts do not guarantee compliance. In the event that we are found to be in violation of our legal, regulatory or contractual requirements, we may be subject to monetary fines or penalties, cease and desist orders, mandatory product changes, or other liabilities that could have an adverse effect on our operating results.

Additionally, with respect to the processing of electronic payment transactions by our third-party electronic payment services providers, we are exposed to financial risk. Electronic payment transactions between our customer and another user may be returned for various reasons such as insufficient funds, fraud or stop payment orders. If we or our electronic payment services provider is unable to collect such amounts from the customer's account (such as if the customer is illegitimate, or if the customer refuses or is unable to reimburse us for the amounts charged back), we bear the ultimate risk of loss for the transaction amount. While we have not experienced material losses resulting from amounts charged back in the past, there can be no assurance that we will not experience these types of significant losses in the future.

In addition to the aforementioned risks associated with our electronic payment services, there is an overarching risk stemming from the potential widespread adoption of quickly evolving financial technology products, including, for example, blockchain or other distributed ledger technologies, that could materially impact the manner in which payments are processed, the mix of payment methodologies conventionally utilized by payors and payees, and the regulatory framework applicable to such payments. The adoption of disruptive financial technologies could significantly reduce the volume of our electronic payment services business or change the transaction costs associated with or potential revenue derived from those payments, thereby reducing our revenue and increasing our associated expenses, which could materially impact our business, financial condition, operating results and, ultimately, our stock price.

Evolution and expansion of our electronic payment services may subject us to additional risks and regulatory requirements.

The evolution and expansion of our electronic payment services may subject us to additional risks and regulatory requirements, including without limitation laws and regulations governing money transmission and anti-money laundering. These requirements vary throughout the markets in which we operate, and several jurisdictions lack clarity with respect to the application and interpretation of these rules. Our efforts to comply with these rules could require significant management time and effort, as well as significant expenditures, and will not guarantee our compliance with all regulatory requirements, especially given that the applicable regulatory frameworks are constantly changing and subject to evolving interpretation. While we maintain a compliance program focused on applicable laws and regulations throughout our applicable industries, there is no guarantee that we will not be subject to fines, penalties or other regulatory actions in one or more jurisdictions, or be required to adjust our business practices to accommodate future regulatory requirements.

We face a number of risks in our tenant screening services business that could adversely affect our business or operating results.

Our tenant screening services business is subject to a number of complex laws that are subject to varying interpretations, including without limitation the Fair Credit Reporting Act (the "FCRA") and related regulations. The FCRA has recently been the subject of multiple class-based litigation proceedings, as well as numerous regulatory inquiries and enforcement actions. In addition, entities such as the Federal Trade Commission (the "FTC") and the Consumer Financial Protection Bureau ("CFPB") have the authority to promulgate rules and regulations that may impact our customers and our business. Although we attempt to structure and adapt our tenant screening services to comply with these and other relevant laws and regulations, we may from time to time be found to be in violation of them. Further, regardless of our compliance with applicable laws and regulations, we may from time to time be subject to regulatory inquiries, enforcement actions, class-based litigation or indemnity demands.

As we have discussed, we completed the settlement of a class action lawsuit related to alleged violations of the FCRA in 2019. In addition, and as previously announced, we received a Civil Investigative Demand from the FTC in December 2018 requesting certain information relating to our compliance with the FCRA in connection with our tenant screening services business. Further, we received a Request for Information from the Civil Rights Division (Housing and Civil Enforcement Section) of the U.S. Department of Justice in July 2019 requesting certain information relating to our compliance with the Servicemembers Civil Relief Act in connection with our tenant screening services business. For additional information regarding legal proceedings, refer to Note 10, *Commitments and Contingencies* of our Consolidated Financial Statements.

Due to the large number of tenant screening transactions in which we participate, our potential liability in an enforcement action or a class action lawsuit could be significant, especially given that certain applicable laws and regulations provide for fines or penalties on a per occurrence basis. The existence of any such enforcement action or class action lawsuit, whether meritorious or not, may adversely affect our ability to attract customers, result in the loss of existing customers, harm our reputation and cause us to incur defense costs or other expenses. Any of the foregoing events may negatively affect our business, financial condition, operating results and, ultimately, our stock price.

We use third-party service providers for important electronic payment and tenant screening services, and their failure to fulfill their contractual obligations could harm our reputation, disrupt our business and adversely affect our operating results.

We use third-party electronic payment services providers to enable us to provide electronic payment services to our customers, and third-party tenant screening services providers to enable us to provide tenant screening services, such as background and credit checks, to our customers. We rely on these service providers to provide us with accurate and timely information, and therefore have significantly less control over our electronic payment and tenant screening services than if we were to maintain and operate them ourselves. In some cases, functions necessary to our business are performed on proprietary third-party systems and software to which we have no access. We also generally do not have long-term contracts with these service providers. In addition, some of these service providers compete with us directly or indirectly in the markets we serve. The failure of these service providers to provide us with accurate and timely information, to fulfill their contractual obligations to us, or to renew their contracts with us, could result in direct liability to us, harm our reputation, result in significant disruptions to our business, and adversely affect our operating results.

Our corporate culture has contributed to our success and, if we cannot continue to foster this culture as we grow, we could lose the passion, creativity, teamwork, focus and innovation fostered by our culture.

We believe that our culture has been and will continue to be a key contributor to our success. If we do not continue to develop our corporate culture or maintain our core values as we grow and evolve, we may be unable to foster the passion, creativity, teamwork, focus and innovation we believe we need to support our growth. Any failure to preserve our culture could negatively affect our ability to recruit and retain personnel and to effectively focus on and pursue our strategic objectives. Moreover, liquidity available to our employee security holders could lead to disparities of wealth among our employees, which could adversely impact

relations among employees and our culture in general. As we grow and mature as a public company, we may find it difficult to maintain our corporate culture. This difficulty is only exacerbated by our rapidly growing number of employees and our geographic expansion.

If we lose key members of our management team, our business may be harmed.

Our success and future growth depend, in part, upon the continued services of our executive officers and other key employees. From time to time, there may be changes in our executive officers or other key employees resulting from the hiring or departure of these personnel, which may disrupt our business. Our executive officers and other key employees are generally employed on an at-will basis, which means that these personnel could terminate their employment with us at any time. Additionally, the equity awards held by many of our executive officers and other key employees are close to fully vested, and these employees may not have sufficient financial incentive to stay with us. The loss of one or more of our executive officers or other key employees, or the failure by our executive team to work effectively with our employees and lead our company, could have an adverse effect on our business.

We depend on highly skilled personnel and, if we are unable to retain or hire additional qualified personnel, we may not be able to achieve our strategic objectives.

To execute our growth plan and achieve our strategic objectives, we must continue to attract and retain highly qualified and motivated personnel across our organization. In particular, in order to continue to enhance our software solutions, add new and innovative core functionality and/or Value+ services, as well as develop new products, it will be critical for us to increase the size of our research and product development organization, including hiring highly skilled software engineers. Competition for software engineers is intense within our industry and there continues to be upward pressure on the compensation paid to these professionals. In addition, in order for us to achieve broader market acceptance of our software solutions, grow our customer base, and pursue adjacent markets and new verticals, we will need to continue to increase the size of our sales and marketing and customer service and support organizations. Identifying and recruiting qualified personnel training them in the use of our software solutions and ensuring they are well-equipped to provide great service to our customers requires a significant investment of time and resources, and it can be particularly difficult to retain these individuals.

Many of the companies with which we compete for experienced personnel have greater name recognition and financial resources than we have. In addition, our headquarters are located in Santa Barbara, California, which is not generally recognized as a prominent commercial center, and it is challenging to attract qualified professionals due to our geographic location. As a result, we may have even greater difficulty hiring and retaining skilled personnel than our competitors. If we hire employees from other companies, their former employers may attempt to assert that we or these employees have breached their legal obligations, resulting in a diversion of our time and resources.

In addition, prospective and existing employees often consider the value of the equity awards they receive in connection with their employment. If the perceived value of our equity awards declines, or if the price of our Class A common stock experiences significant volatility, this may adversely affect our ability to recruit and retain highly skilled employees. If we are unable to attract and retain the personnel necessary to execute our growth plan, we may be unable to achieve our strategic objectives and our operating results may suffer.

The markets in which we participate are intensely competitive and, if we do not compete effectively, our business could be harmed.

The overall market for business management software is global, highly competitive and continually evolving in response to a number of factors, including changes in technology, operational requirements, and laws and regulations. The market for cloud-based business management software is also highly competitive and subject to similar market factors.

While we focus on providing industry-specific, cloud-based business management software solutions in our targeted verticals, we compete with other vertical cloud-based solution providers, as well as with horizontal cloud-based solution providers that provide broad cloud-based solutions across multiple verticals. Our competitors include established vertical software vendors, as well as newer entrants in the market. We also face competition from numerous cloud-based solution providers that focus almost exclusively on one or more point solutions. Continued consolidation among cloud-based providers could lead to significantly increased competition.

Although the domain expertise required to successfully develop, market and sell cloud-based business management software solutions in the real estate and legal verticals may hinder new entrants that are unable to invest the necessary resources to develop and deploy cloud-based solutions with the same level of functionality as ours, many of our competitors and potential

competitors are larger and have greater name recognition, longer operating histories, and significantly greater resources than we do. As a result, our competitors may be able to respond more quickly and effectively to new or changing opportunities, technologies, operational requirements and industry standards. Some of these competitors may have more established customer relationships or strategic partnerships with third parties that enhance their products and services. Other competitors may offer products or services that address one or a number of business functions on standalone basis at lower prices or bundled as part of a broader product sale, or with greater depth than our software solutions. In addition, our current and potential competitors may develop, market and sell new technologies with comparable functionality to our software solutions, which could cause us to lose customers, slow the rate of growth of new customers and cause us to decrease our prices in order to remain competitive. For all of these reasons, we may not be able to compete effectively against our current and future competitors, which could harm our business.

Business management software for small and medium-sized businesses ("SMBs") is a relatively new and developing market and, if the market is smaller than we estimate or develops more slowly than we expect, our operating results could be adversely affected.

We provide cloud-based business management software for SMBs in the real estate and, to a lesser extent, legal markets and will assess entry into new or adjacent markets consistent with our strategic plan. Our success will depend, in part, on the continued widespread adoption by SMBs of cloud computing in general and of cloud-based business management software in particular.

The market for industry-specific, cloud-based business management software for SMBs, both generally, and specifically within the real estate and legal markets, is evolving and, in comparison to the overall market for cloud-based solutions, is relatively small. The continued expansion of this market depends on numerous factors, including:

- the cost and perceived value associated with cloud-based business management software relative to on-premise software applications and disparate point solutions;
- the ability of cloud-based solution providers to offer SMBs the functionality they need to operate and grow their businesses;
- the willingness of SMBs to transition from their existing software systems, or otherwise alter their existing business practices, to migrate their businesses to a vertical cloud-based business management software solution; and
- the ability of cloud-based solution providers to address security, privacy, availability and other concerns.

Notwithstanding our efforts to increase sales of our software solutions to larger customers, if cloud-based business management software does not continue to achieve widespread market acceptance among SMBs, our revenue may increase at a slower rate than we expect and may even decline, which could adversely affect our operating results. In addition, it is difficult to estimate the rate at which SMBs will be willing to transition to vertical cloud-based business management software in any particular period, which makes it difficult to estimate the overall size and growth rate of the market for cloud-based business management software for SMBs at any given point in time or to forecast growth in our revenue or market share.

If we are unable to introduce successful enhancements, including new and innovative core functionality and/or Value+ services, or new products for adjacent markets or additional verticals, our operating results could be adversely affected.

The software industry in general, and our targeted verticals in particular, are characterized by rapid technological advances, changing industry standards, evolving customer requirements and intense competition. Our ability to attract new customers, increase revenue from our existing customers, and expand into adjacent markets or new verticals depends, in part, on our ability to enhance the functionality of our existing software solutions by introducing new and innovative core functionality and/or Value+ services that keep pace with technological developments and address the evolving business needs of our customers. In addition, our growth over the long term depends, in part, on our ability to introduce new products for adjacent markets and, potentially, additional verticals that we identify through our market validation process. Market acceptance of our current and future software solutions will depend on numerous factors, including:

- the unique functionality and ease of use of our software solutions and the extent to which our software solutions meet the business needs of our customers;
- the perceived benefits and security of our cloud-based business management software solutions relative to on-premise software applications or other competitive products;
- the pricing of our software solutions relative to competitive products;

- perceptions about the security, privacy and availability of our software solutions relative to competitive products;
- time-to-market of the updates and enhancements to our core functionality, Value+ services and new products; and
- perceptions about the quality and responsiveness of our customer service organization.

If we are unable to successfully enhance the functionality of our existing software solutions, including our core solutions and Value+ services, and develop or acquire new products that gain market acceptance in adjacent markets and additional verticals consistent with our strategic plan, our revenue may increase at a slower rate than we expect and may even decline, which could adversely affect our operating results.

Our business depends substantially on existing customers renewing their subscriptions with us and expanding their use of our Value+ services, and a decline in customer renewal rates, or failure to convince existing customers to adopt and utilize our Value+ services, could adversely impact our operating results.

In order for us to maintain or increase our revenue and improve our operating results, it is important that our existing customers continue to pay subscription fees for the use of our core solutions, which tend to incrementally rise over time, as well as increase their adoption and utilization of our Value+ services. Our customers have no obligation to renew their subscriptions with us upon expiration of their subscription periods, which typically range from one month to one year. We cannot assure you that our customers will renew their subscriptions with us. In addition, our law firm customers that start their accounts using a 10-day free trial have no obligation to begin a paid subscription. Furthermore, although a significant portion of our revenue growth has historically resulted from the adoption and utilization of our Value+ services by our existing customers, we cannot assure you that our existing customers will continue to broaden their adoption and utilization of our Value+ services, or use our Value+ services at all. If our existing customers do not renew their subscriptions and increase their adoption and utilization of our existing or newly developed Value+ services, our revenue may increase at a slower rate than we expect and may even decline, which could adversely impact our financial condition and operating results.

Word-of-mouth referrals represent a significant source of new customers for us and provide us with an opportunity to cost-effectively market and sell our software solutions. The loss of our existing customers could have a significant impact on our reputation in our targeted verticals and our ability to acquire new customers cost-effectively. A reduction in the number of our existing customers, even if offset by an increase in new customers, could have the impact of reducing our revenue and operating margins.

In an effort to retain our customers and to expand our customers' adoption and utilization of our Value+ services, we may choose to use increasingly costly sales and marketing efforts. In addition, we may make significant investments in research and product development to introduce Value+ services that ultimately are not broadly adopted by our customers. In either of those cases, we could incur significantly increased costs without a corresponding increase in revenue. Furthermore, we may fail to identify Value+ services that our customers need for their businesses, in which case we could miss opportunities to increase our revenue.

Pricing pressure may cause us to change our pricing model, which could hurt our renewal rates and our ability to attract new customers, as well as our ability to increase adoption and usage of our Value+ services, which could adversely affect our operating results.

As the markets for our existing software solutions mature, or as current and future competitors introduce new products or services that compete with ours, we may experience pricing pressure and be unable to renew our subscription agreements with existing customers or increase adoption and usage of our Value+ services, or attract new customers at prices that are consistent with our current pricing model and operating budget. If this were to occur, it is possible that we would have to change our pricing model, offer pricing incentives, or generally reduce our prices, which may adversely affect our revenue even if adoption and utilization remain constant. In addition, many of our customers are smaller companies or firms, which are typically more cost sensitive than larger enterprises. Changes to our pricing model could harm our customer retention rates and our ability to attract new customers, whether in connection with our core solutions or our Value+ services, which could adversely affect our operating results.

We expect to continue to derive a significant portion of our revenue from our real estate customers, and factors resulting in a loss of these customers could adversely affect our operating results.

Historically, more than 90% of our revenue has been derived from real estate customers, and we expect that our real estate customers will continue to account for a significant portion of our revenue for the foreseeable future. We could lose real estate customers as a result of numerous factors, including:

- the expiration and non-renewal of subscriptions or termination of subscription agreements;
- the introduction of competitive products or technologies;
- our failure to provide updates and enhancements to our core functionality and/or Value+ services, and to introduce new Value+ services to our customers;
- changes in pricing policies by us or our competitors;
- acquisitions or consolidations within the real estate vertical;
- bankruptcies or other financial difficulties facing our customers;
- new or enhanced legal or regulatory regimes that negatively impact the real estate vertical; and
- conditions or trends that are specific to the real estate vertical such as the economic factors that impact the rental market.

The loss of a significant number of our real estate customers, or the loss of even a small number of our larger real estate customers, could cause our revenue to increase at a slower rate than we expect or even decline. In addition, even if we are able to retain our real estate customers, we may be unable to grow revenue from these real estate customers by increasing their adoption and utilization of our Value+ services. Any of these outcomes could adversely affect our operating results.

If we are unable to increase sales of our software solutions to larger customers while mitigating the risks associated with serving such customers, our business and operating results may suffer.

While we plan to continue to market and sell our software solutions to smaller companies or firms, our growth strategy is dependent, in part, upon increasing sales of our software solutions to larger customers within the real estate and legal markets. Sales to larger customers may involve risks that are not present, or are present to a lesser extent, in sales to smaller businesses. As we seek to increase our sales to larger customers, we may invest considerably greater amounts of time and financial resources in our sales and marketing efforts. In addition, we may face longer sales cycles and experience less predictability and greater competition in completing some of our sales than we have in selling our software solutions to smaller businesses. Although we generally have not configured our software solutions or negotiated our pricing for specific customers, which has historically resulted in reduced upfront selling costs, our ability to successfully sell our software solutions to larger customers may be dependent, in part, on our ability to develop functionality, or to implement pricing policies, that are unique to particular customers or are necessary for success in a market segment dominated by larger customers. It may also be dependent on our ability to attract and retain sales personnel with experience selling to larger organizations. Also, because security breaches or other performance problems with respect to larger customers may result in greater economic harm to these customers and more adverse publicity, there is increased financial and reputational risk associated with serving such customers. Further, our ability to sell our software solutions to larger customers may depend largely upon our successful acquisition and integration of synergistic businesses, and, if we are unable to acquire and integrate such businesses successfully, then our business and operating results may be negatively impacted. If we are unable to increase sales of our software solutions to larger customers, while mitigating the risks associated with serving such customers, our business and operating results may suffer.

Our growth depends in part on the success of our strategic relationships with third parties, and if we are unsuccessful in establishing or maintaining these relationships, our ability to compete in our targeted markets or grow our revenue could be impaired.

In order to grow our business, we anticipate that we will continue to depend on our relationships with third parties, including our data center operators, cloud computing service providers, electronic payment, tenant screening and insurance services providers, and other third parties that support delivery of our software solutions. Identifying partners, negotiating agreements and maintaining relationships requires significant time and resources. Our competitors may be more effective than us in cost-effectively building relationships with third parties that enhance their products and services, allow them to provide more competitive pricing, or offer other benefits to their customers. In addition, acquisitions of our partners by our competitors or others could result in a decrease in the number of current and potential strategic partners willing to establish or maintain relationships with us, and could increase the price at which products or services are available to us. If we are unsuccessful in establishing or maintaining our relationships with third parties, our ability to compete in the marketplace or to grow our revenue could be impaired, which could

negatively impact our operating results. Even if we are successful, we cannot assure you that these relationships will result in increased customer adoption and usage of our software solutions or improved operating results. Furthermore, if our partners fail to perform as expected, we may be subjected to litigation, our reputation may be harmed, and our business and operating results could be adversely affected.

We depend on data centers and computing infrastructure operated by third parties and any disruption in these operations could adversely affect our operating results.

We currently serve our customers through a combination of our own servers located in third party data center facilities, and computing resources operated by Amazon and other third party cloud computing service providers. While we control and have access to our own servers and the other components of our network that are located in our third party data centers, we do not control the operation of any of these third party data center facilities. The owners of our data center facilities have no obligation to renew their agreements with us on commercially reasonable terms, or at all. If we are unable to renew these agreements on commercially reasonable terms, or if one of our third party data center operators is acquired, we may be required to transfer our servers and other infrastructure to new data center facilities, and we may incur significant costs and possible service interruptions in connection with doing so. Further, our third party data center providers could experience significant outages outside of our control that could adversely affect our business.

Problems faced by our third party data center operators, or with any of the service providers with whom we or they contract, could adversely affect the experience of our customers. Our third party data center operators could decide to close their facilities without adequate notice. In addition, any financial difficulties, such as bankruptcy, faced by our third party data center operators, or any of the service providers with whom we or they contract, may have negative effects on our business. Additionally, if our data centers are unable to keep up with our growing needs for capacity or any spikes in customer demand, this could have an adverse effect on our business. Any changes in third party service levels at our data centers could result in loss of or damage to our customers' stored information and service interruptions, which could harm our reputation. These issues could also cause us to lose customers, harm our ability to attract new customers, and subject us to potential liability, any of which could adversely affect our operating results.

The cloud computing service providers with which we contract may experience service interruptions across multiple regions that are outside of our control. Furthermore, they may not be able to provide us with additional computing resources needed to scale our infrastructure ahead of our growing customer base. If any of these issues arise, we may be required to migrate our cloud computing resources, or add new computing resources, to other cloud computing service providers. Although our infrastructure is redundant across multiple geographic regions, it might require significant effort to migrate all of our services to a different region if we are forced to recover from a data center's severe impairment or total destruction, or from a regional, or multi-regional, outage by any of our cloud computing service providers. Any changes in service levels by our cloud computing service providers could result in loss of or damage to our customers' stored information and service interruptions, which could harm our reputation, subject us to potential liability, and adversely affect our operating results.

Our platform must integrate with a variety of devices, operating systems and browsers that are developed by others, and if we are unable to ensure that our software solutions interoperate with such devices, operating systems and browsers, our software solutions may become less competitive, and our operating results may be harmed.

We offer our software solutions across a variety of operating systems and through the Internet. We are dependent on the interoperability of our platform with third party devices, desktop and mobile operating systems, as well as web browsers that we do not control. Any changes in such devices, systems or web browsers that degrade the functionality of our software solutions or give preferential treatment to competitive services could adversely affect adoption and usage of our software solutions. In addition, in order to deliver high quality software solutions, we will need to continuously enhance and modify our functionality to keep pace with changes in Internet-related hardware, mobile operating systems such as iOS and Android, browsers and other software, communication, network and database technologies. We may not be successful in developing enhancements and modifications that operate effectively with these devices, operating systems, web browsers and other technologies or in bringing them to market in a timely manner. Furthermore, uncertainties regarding the timing or nature of new network platforms or technologies, and modifications to existing platforms or technologies, could increase our research and product development expenses. In the event that it is difficult for our customers to access and use our software solutions, our software solutions may become less competitive, and our operating results could be adversely affected.

If our property management customers stop requiring residents to provide proof of legal liability to landlord insurance, if insurance premiums decline or if insureds experience greater than expected losses, our operating results could be harmed.

We generate revenue by offering legal liability to landlord insurance through a wholly owned subsidiary. Some of our property management customers require residents to provide proof of legal liability to landlord insurance and offer to enroll residents in their legal liability to landlord insurance policy. If demand for rental housing declines, or if our property management customers believe that it may decline, these customers may reduce their rental rates and stop requiring residents to provide proof of legal liability to landlord insurance in order to reduce the overall cost of renting and make their rental offerings more competitive. If our property management customers stop requiring residents to provide proof of legal liability to landlord insurance or elect to enroll residents in insurance programs offered by competing providers, or if insurance premiums otherwise decline, our revenues from insurance services could be adversely affected.

Additionally, our legal liability to landlord insurance policies are underwritten by us, and we are required by our insurance partner to maintain a reserve to cover potential claims under the policies. While our policies have a limit of \$100,000 per occurrence, there is no limit on the dollar amount of claims that could be made against us in any particular period or in the aggregate. In the event that claims by the insureds increase unexpectedly, our reserve may not be sufficient to cover our resulting liability under the policies. To the extent we are required to pay out amounts to insureds that are significantly higher than our current reserves, this could have a material adverse effect on our operating results.

Our insurance business is subject to state governmental regulation, which could limit the growth of our insurance business and impose additional costs on us.

Our insurance-related wholly owned subsidiaries and third-party service providers maintain licenses with a number of individual state departments of insurance. Collectively, we are subject to state governmental regulation and supervision in connection with the operation of our insurance business, which includes both our legal liability to landlord insurance and renters insurance businesses. This state governmental supervision could limit the growth of our insurance business by increasing the costs of regulatory compliance, limiting or restricting the products or services we provide or the methods by which we provide them, and subjecting us to the possibility of regulatory actions or proceedings. Our continued ability to maintain these insurance licenses in the jurisdictions in which we are licensed depends on our compliance with the rules and regulations promulgated from time to time by the regulatory authorities in each of these jurisdictions. Furthermore, state insurance departments conduct periodic examinations, audits and investigations of the affairs of insurance companies and agencies, any of which could result in the expenditure of significant management time or financial resources.

In all jurisdictions, the applicable laws and regulations are subject to amendment and interpretation by regulatory authorities. Generally, such authorities are vested with relatively broad discretion to grant, renew and revoke licenses and approvals and to implement and interpret rules and regulations. Accordingly, we may be precluded or temporarily suspended from carrying on some or all of the activities of our insurance business or otherwise be fined or penalized in a given jurisdiction. No assurances can be given that our insurance business can continue to be conducted in any given jurisdiction as it has been conducted in the past or that we will be able to expand our insurance business in the future.

If we are unable to enter new verticals, or if our software solution for any new vertical fails to achieve market acceptance, our operating results could be adversely affected and we may be required to reconsider our growth strategy.

Our growth strategy is dependent, in part, on our ability to expand into new verticals, beyond the real estate and legal markets. However, we may be unable to identify new verticals that meet our criteria for selecting industries that cloud-based solutions are ideally suited to address. In addition, our market validation process may not support entry into selected verticals due to our perception of the overall market opportunity or of the willingness of market participants within those verticals to adopt our software solutions. Further, instead of pursuing new verticals, we may prefer for various reasons to pursue alternative growth strategies, such as entry into markets that are adjacent to the markets in which we currently participate within our existing verticals, or the development of additional products or services for our existing markets.

Even if we choose to enter new verticals, our market validation process does not guarantee our success. We may be unable to develop a software solution for a new vertical or, in the event that we enter a new vertical by way of a strategic acquisition, we may be unable to leverage the acquired software solution in time to take advantage of the identified market opportunity, and any delay in our time-to-market could expose us to additional competition or other factors that could impede our success. In addition, any software solution we develop or acquire for a new vertical may not provide the functionality required by potential customers and, as a result, may not achieve widespread market acceptance within the new vertical. To the extent we choose to enter new verticals, whether organically or via strategic acquisition, we may invest significant resources to develop and expand the functionality of our software solutions to meet the needs of customers in those verticals, which investments will occur in advance of our realization of revenue from them.

In addition, while we expedited our entry into the legal vertical through the acquisition of MyCase in 2012, our practice and case management solution is in an earlier stage of development than APM, our property management solution, and we are at an earlier stage in the process of expanding the core functionality and Value+ services associated with our legal software. We face significant competition in the legal market from both vertical software vendors and cloud-based solution providers that offer one or more point solutions. There can be no assurance that we will be able to achieve market acceptance for our legal software at or near the levels achieved by our property management software.

All of our revenues are generated by sales to customers in our targeted verticals, and factors that adversely affect the applicable industry could also adversely affect us.

Currently, all of our sales are to customers in the real estate market and, to a lesser extent, the legal market. Demand for our software solutions and services could be affected by factors that are unique to and adversely affect our targeted verticals. In particular, the real estate and legal markets, as well as many of the software solutions and services we offer in those markets, are highly regulated across multiple federal, state and local jurisdictions, subject to intense competition and impacted by changes in general economic and market conditions. For example, changes in applicable laws and regulations could significantly impact the features and functionality demanded by our customers and require us to expend significant resources to ensure our software solutions continue to meet their evolving needs. In addition, other industry-specific factors, such as industry consolidation or the introduction of competing or disruptive technology, could lead to a significant reduction in the number of customers that use our software solutions or the Value+ services demanded by these customers. Further, if the real estate or legal markets decline, our customers may decide not to renew their subscriptions or they may cease using our Value+ services in order to reduce costs to remain competitive. As a result, our ability to generate revenue from our real estate and legal market customers could be adversely affected by specific factors that affect the real estate or legal markets.

In addition to the foregoing risks associated with our targeted verticals themselves, there is an overarching risk stemming from potential widespread adoption of quickly evolving financial or other disruptive technology products that could significantly impact our targeted verticals, even if that technology is not specifically designed to apply directly to our targeted verticals. The adoption of these new technologies could significantly reduce the volume or demand of customers in our targeted verticals, thereby reducing our revenue, which could materially impact our business, financial condition, operating results and, ultimately, our stock price.

If we are unable to deliver effective customer service, it could harm our relationships with our existing customers and adversely affect our ability to attract new customers.

Our business depends, in part, on our ability to satisfy our customers, both by providing software solutions that address their business needs, and by providing onboarding services and ongoing customer service, which contributes to retaining customers and increasing adoption and utilization of our Value+ services by our existing customers. Once our software solutions are deployed, our customers depend on our customer service organization to resolve technical issues relating to their use of our solutions. We may be unable to respond quickly to accommodate short-term increases in customer demand for support services or may otherwise encounter a customer issue that is difficult to resolve. If a customer is not satisfied with the quality or responsiveness of our customer service, we could incur additional costs to address the situation. As we do not separately charge our customers for support services, increased demand for our support services would increase costs without corresponding revenue, which could adversely affect our operating results. In addition, regardless of the quality or responsiveness of our customer service efforts, a customer that is not satisfied with an outcome may choose to terminate, or not to renew, their relationship with us.

Our sales process is highly dependent on the ease of use of our software solutions, our reputation and positive recommendations from our existing customers. Any failure to maintain high-quality or responsive customer service, or a market perception that we do not maintain high-quality or responsive customer service, could harm our reputation, cause us to lose customers and adversely impact our ability to sell our software solutions to prospective customers.

Our software solutions address functions within the heavily regulated real estate and legal markets, and our customers' failure to comply with applicable laws and regulations could subject us to litigation.

We sell our software solutions to customers within the real estate market and, to a lesser extent, the legal market. Our customers use our software solutions for business activities that are subject to a number of laws and regulations, including without limitation federal, state and local real property laws and legal ethics rules. Any failure by our customers to comply with laws and regulations applicable to their businesses could result in fines, penalties or claims for substantial damages against our customers. To the extent our customers believe, or any other potentially aggrieved stakeholder believes, that our software solutions or our customer service and support organization caused or contributed to such failures, our customers and/or other third parties may make claims for damages against us, regardless of whether we are responsible for the failure. As a result, we may be subject to

lawsuits or other proceedings that, even if unsuccessful, could divert our resources and our management's attention and adversely affect our business, and our insurance coverage may not be sufficient to cover such claims against us.

If we are unable to maintain and promote our brands, or to do so in a cost-effective manner, our ability to maintain and expand our customer base will be impaired, and our operating results could be adversely affected.

We believe that maintaining and promoting our brands is critical to achieving widespread awareness and acceptance of our software solutions, and maintaining and expanding our customer base. We also believe that the importance of brand recognition will increase as competition in our targeted verticals increases. If we do not continue to build awareness of our brands, we could be placed at a competitive disadvantage as compared to companies whose brands are, or become, more recognizable than ours. Maintaining and promoting our brands will depend, in part, on our ability to continue to provide new and innovative core functionality and Value+ services and best-in-class customer service, as well as the effectiveness of our sales and marketing efforts. If we fail to deliver products and functionality that address our customers' business needs, or if we fail to meet our customers' expectations for customer service, it could weaken our brands and harm our reputation. Additionally, the actions of third parties which are out of our control may affect our brands and reputation if customers do not have a positive experience using the services of our third party partners that support our software solutions. Maintaining and enhancing our brands may require us to make substantial investments, and these investments may not result in commensurate increases in our revenue. If we fail to successfully maintain and promote our brands, or if we make investments that are not offset by increased revenue, our operating results could be adversely affected.

Failure to protect our intellectual property rights could impair our ability to protect our proprietary technology and our brands, which could harm our business.

We currently rely on patent, trademark, copyright and trade secret laws, trade secret protection and confidentiality or license agreements with our employees, customers, partners and others to protect our intellectual property rights. Our success and ability to compete depend, in part, on our ability to continue to protect our intellectual property, including our proprietary technology and our brands. If we are unable to protect our proprietary rights adequately, our competitors could use the intellectual property we have developed to enhance their own products and services, which could harm our business.

In order to monitor and protect our intellectual property rights, we may be required to expend significant resources. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming and distracting to management, and could result in the impairment or loss of portions of our intellectual property or require us to pay costly royalties. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims and countersuits attacking the validity and enforceability of our intellectual property rights. Accordingly, we may not be able to prevent third parties from infringing upon or misappropriating our intellectual property. Our failure to secure, protect and enforce our intellectual property rights could adversely affect our business and operating results.

We may be sued by third parties for alleged infringement of their proprietary rights, which could cause us to incur significant expenses and require us to pay substantial damages.

There is considerable patent, trademark, copyright, trade secret and other intellectual property development activity in our industry. Our success depends, in part, on our not infringing upon the intellectual property rights of others. Our competitors, as well as a number of other entities and individuals, may legally own or claim to own intellectual property relating to our technology or software solutions, including without limitation technology we develop and build internally and that which we acquire. From time to time, our competitors or other third parties may claim that we are infringing upon their intellectual property rights. However, we may be unaware of the intellectual property rights that others may claim cover some or all of our technology or software solutions. Any claims or litigation, regardless of merit, could cause us to incur significant expenses and, if successfully asserted against us, could require that we pay substantial damages, settlement costs or ongoing royalty payments, require that we comply with other unfavorable license and other terms, or prevent us from offering our software solutions in their current form. Even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the attention of our management and key personnel from our business operations and harm our operating results.

We have incurred and expect to continue to incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to compliance with legal requirements and corporate governance initiatives.

As a public company, we have incurred and expect to continue to incur significant legal, accounting, compliance and other expenses. We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 ("SOX"), the listing requirements of the NASDAQ Global Market, and other applicable securities rules and regulations. Compliance with these

rules and regulations will continue to increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly, and increase demand on our systems and resources.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure requirements are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more difficult and time consuming. These laws, regulations and standards are subject to varying interpretations and their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management's time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us, which could result in a material adverse impact on our business.

Compliance with the requirements of Section 404 of SOX is and will continue to be costly and divert management resources, and we and our independent registered public accounting firm may be unable to conclude that our internal control over financial reporting is effective.

Pursuant to Section 404 of SOX, we are required to furnish an annual report by our management on our internal control over financial reporting. We are required to include in our Annual Report an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve and maintain compliance with Section 404, we have been and will continue to be engaged in a process to document and evaluate our internal control over financial reporting, which will be costly and result in a diversion of management resources. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are functioning as documented, and implement a continuous reporting and improvement process for internal control over financial reporting.

Despite our efforts, there is a risk that in the future neither we nor our independent registered public accounting firm will be able to conclude that our internal control over financial reporting is effective as required by Section 404. If this were to occur, we could be subject to investigations or enforcement actions by the SEC or other regulatory authorities, stockholder lawsuits or other adverse actions, any of which could require us to incur defense costs, pay fines, settlements or judgments, or incur other costs or expenses. Furthermore, investor perceptions of our business may suffer if deficiencies are found, which could cause a decline in the market price of our Class A common stock.

Irrespective of our compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our stated results of operations and harm our reputation. If we are unable to implement these requirements effectively, it could harm our business, and could result in an adverse opinion on our internal control over financial reporting from our independent registered public accounting firm.

Because we recognize revenue from subscriptions for our software solutions over the term of each subscription agreement, downturns or upturns in new business may not be immediately reflected in our operating results.

We recognize revenue from customers ratably over the term of each subscription agreement, which typically ranges from one month to one year. As a result, some of the revenue we report in each period is derived from the recognition of deferred revenue relating to subscription agreements entered into during previous periods. Consequently, a decline in new or renewed subscriptions in any one period may not be reflected in our revenue results for that period. However, any such decline will negatively affect our revenue in future quarters. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as revenue from new customers must be recognized over the applicable subscription period. Accordingly, the effect of downturns or upturns in our sales, the market acceptance of our software solutions, and potential changes in our customer retention rates, may not be apparent in our operating results until future periods.

Our software solutions contain both third-party and open source software, which may pose risks to our proprietary source code and/or introduce security vulnerabilities, and could have a negative impact on our business and operating results.

We use open source software in our software solutions and expect to continue to do so in the future. The terms of many open source licenses to which we are subject have not been interpreted by United States or foreign courts, and there is a risk that open source licenses could be construed in a manner that imposes unanticipated conditions, restrictions or costs on our ability to provide or distribute our software solutions. Additionally, we may from time to time face claims from third parties alleging

ownership of, or demanding release of, the open source software or of derivative works that we developed using such software, which could include our proprietary source code, or otherwise seeking to enforce the terms of the applicable open source license. These claims could result in litigation, which could be costly for us to defend, and could require us to make our source code freely available, purchase a costly license or cease offering the implicated functionality unless and until we can re-engineer them to avoid infringement. This re-engineering process could require significant additional research and product development resources, and we may not be able to complete it successfully or in a timely manner. In addition to risks related to license requirements, usage of certain open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or controls on the origin of software. These risks could be difficult to eliminate or manage, and could have a negative impact on our business and operating results.

We also use third-party commercial software in our software solutions and expect to continue to do so in the future. Third-party commercial software is developed outside of our direct control and may introduce security vulnerabilities that may be difficult to anticipate or mitigate. Further, there is no guarantee that third-party software developers or open source software providers will continue active work on the third-party software that we use. Should development of in-use third-party software cease, significant engineering effort may be required to create an in-house solution. These risks could also be difficult to eliminate or manage, and could have a negative impact on our business and operating results.

There are risks associated with our outstanding and future indebtedness that could adversely affect our financial condition.

As of December 31, 2019, we had \$48.6 million of outstanding indebtedness under a term loan that will mature on December 24, 2023 (the "Term Loan"), pursuant to our credit agreement with Wells Fargo Bank, National Association ("Wells Fargo"), and we may incur additional indebtedness in the future and/or enter into new financing arrangements. In addition, as of December 31, 2019, we had \$50 million available for borrowing under our revolving credit facility with Wells Fargo (the "Revolving Facility" and together with the Term Loan, the "Credit Facility"). Our ability to meet expenses, to remain in compliance with the covenants under our debt instruments, and to pay fees, interest and principal on our substantial level of indebtedness depends on, among other things, our operating performance, competitive developments, and financial market conditions, all of which are significantly affected by financial, business, economic, and other factors. We are not able to control many of these factors. Accordingly, our cash flow may not be sufficient to allow us to pay principal and interest on our debt and meet our other obligations.

Our level of indebtedness could have important consequences, including the following:

- We must use a portion of our cash flow from operations to pay fees, interest and principal on the Term Loan and Revolving Facility which reduces funds available to us for other purposes such as working capital, capital expenditures, other general corporate purposes, and potential acquisitions;
- We may be unable to refinance our indebtedness or to obtain additional financing for working capital, capital expenditures, acquisitions, or general corporate purposes;
- We are exposed to fluctuations in interest rates because borrowings under our credit facilities bear interest at variable rates;
- Our leverage may be greater than that of some of our competitors, which may put us at a competitive disadvantage and reduce our flexibility in responding to current and changing industry and financial market conditions;
- We may be more vulnerable to an economic downturn and adverse developments in our business; and
- We may be unable to comply with financial and other covenants in our debt agreements, which could result in an event of default that, if not cured or waived, may result in acceleration of certain of our debt, have an adverse effect on our business and prospects and force us into bankruptcy or liquidation.

There can be no assurance that we will be able to manage any of these risks successfully.

In addition, we conduct a portion of our operations through our subsidiaries. Accordingly, repayment of our indebtedness will be dependent in part on the generation of cash flow by our subsidiaries and their ability to make such cash available to us by dividend, distribution or otherwise. Our subsidiaries may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of our indebtedness. Each subsidiary is a distinct legal entity, and under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries. In the event that we do not receive distributions from our subsidiaries, we may be unable to make the required fee, interest and principal payments on our indebtedness.

Financing agreements that we are party to or may become party to may contain operating and financial covenants that restrict our business and financing activities. Failure to comply with these covenants, or other restrictions, could result in default under these agreements.

Our existing credit agreement with Wells Fargo as administrative agent, and the lenders that are parties thereto, which we refer to as the Second Amendment of our Original Credit Agreement, contains certain operating and financial restrictions and covenants, including limitations on dividends, dispositions of all or substantially all of our assets, mergers or consolidations, incurrence of indebtedness and liens, and other corporate activities. These restrictions and covenants, as well as those contained in any future financing agreements that we may enter into, may restrict our ability to finance our operations, and to engage in, expand or otherwise pursue our business activities and strategic objectives. Our ability to comply with these covenants may be affected by events beyond our control, and breaches of these covenants could result in a default under the Second Amendment of our Original Credit Agreement and any future financing agreements that we may enter into. If not waived, defaults could cause any outstanding indebtedness under the Second Amendment of our Original Credit Agreement and any future financing agreements that we may enter into to become immediately due and payable, and allow the lenders to proceed against any collateral securing that indebtedness.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2019, we had federal net operating loss carryforwards of \$82.1 million, which will begin to expire in 2031. At December 31, 2019, we had state net operating loss carryforwards of \$65.9 million, which will begin to expire in 2028. At December 31, 2019, we also had federal and state research and development credit carryforwards of \$11.4 million and \$10.8 million, respectively. The federal credit carryforwards will begin to expire in 2027, while the majority state credits carryforwards apply indefinitely. Under Section 382 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an “ownership change,” the corporation’s ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income and taxes may be limited. In general, an “ownership change” occurs if there is a cumulative change in our ownership by “5% shareholders” that exceeds 50% over a rolling three-year period. Similar rules may apply under state tax laws. It is possible that our existing net operating loss and/or credit carryforwards may be subject to limitations arising from previous ownership changes, and future issuances of our stock could cause an ownership change. Furthermore, our ability to utilize net operating loss and/or credit carryforwards of companies that we have acquired or may acquire in the future may be subject to limitations. There is also a risk that due to legislative changes, such as suspensions on the use of net operating loss carryforwards, or other unforeseen reasons, our existing net operating loss carryforwards could expire or otherwise be unavailable to offset future income tax liabilities. In addition, under the Tax Cuts and Jobs Act, the amount of net operating loss carryforwards that we are permitted to deduct in any taxable year is limited to 80% of our taxable income in such year, where taxable income is determined without regard to the net operating loss carryforward deduction itself. For these reasons, we may not be able to realize a tax benefit from the use of our net operating loss carryforwards. Any such limitations on our ability to use our net operating loss carryforwards and other tax assets could adversely impact our business, financial condition and operating results.

Tax laws or regulations could be enacted or changed and existing tax laws or regulations could be applied to us or to our customers in a manner that could increase the costs of our software solutions and adversely impact our operating results.

The application of federal, state, local and foreign tax laws to services provided electronically is continuously evolving. New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted or amended at any time, possibly with retroactive effect, and could be applied solely or disproportionately to services provided over the Internet. These enactments or amendments could adversely affect our sales activity due to the inherent cost increase the taxes would represent and could ultimately result in a negative impact on our operating results.

In addition, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, modified or applied adversely to us, possibly with retroactive effect, which could require us or our customers to pay additional tax amounts, as well as require us or our customers to pay fines or penalties, as well as interest on past amounts. If we are unsuccessful in collecting such taxes due from our customers, we could be held liable for such costs, thereby adversely impacting our operating results.

We may be subject to additional tax liabilities.

We are subject to income, sales, use, value added and other taxes in the United States and other jurisdictions in which we conduct business, and such laws and rates vary by jurisdiction. Certain jurisdictions in which we do not collect sales, use, value added or other taxes on our sales may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, and we may be required to pay or collect such taxes in the future. If we receive an adverse determination as a result of an audit or related litigation, or we unilaterally determine that we have misinterpreted provisions of the tax regulations to which

we are subject, there could be a material effect on our tax provision, net income or cash flows in the period or periods for which that determination is made.

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

A component of our growth strategy involves the expansion of our international operations and worldwide customer base. To date, we have realized an immaterial amount of revenue from customers outside the United States. Operating in international markets will require significant resources and management attention and will subject us to regulatory, economic, geographic and political risks, including but not limited to the risk of disruptions caused by regional natural disasters or health epidemics, that are different from those in the United States. Because of our limited experience with international operations and significant differences between the United States and international markets, our international expansion efforts may not be successful in creating demand for our software solutions outside of the United States or in effectively selling our software solutions in any international markets we may enter. If we invest substantial time and resources to expand our international operations and are unable to do so successfully, our business and operating results could suffer.

Risks Related to Our Class A Common Stock

The market price of our Class A common stock may be volatile or may decline regardless of our operating performance, which could result in substantial losses for our stockholders.

The market price of our Class A common stock has been, and is likely to continue to be, highly volatile, and fluctuations in the price of our Class A common stock could cause you to lose all or part of your investment. For example, during 2019, the share price of our Class A common stock on the NASDAQ Global Market fluctuated between \$55.00 and \$116.98.

There are numerous factors that could cause fluctuations in the market price of our Class A common stock, including:

- volatility in the trading volume of our Class A common stock;
- price and volume fluctuations in the overall stock market;
- volatility in the market prices and trading volumes of securities issued by software companies;
- changes in operating performance and stock market valuations of software companies generally or those in our markets in particular;
- sales of shares of our Class A common stock by us or our stockholders, or perceptions that such sales may occur;
- any future announcements to repurchase our Class A common stock, and any actual share repurchases that we may undertake from time to time;
- failure of securities analysts to maintain coverage of us, changes in financial estimates by securities analysts who follow us, or our failure to meet these estimates or the expectations of investors;
- the guidance we may provide to the public, any changes in that guidance, and our performance relative to that guidance;
- announcements by us or our competitors of new products or services;
- public reaction to our press releases, filings with the SEC and other public announcements;
- rumors and market speculation involving us or other software companies;
- actual or anticipated changes in our operating results or fluctuations in our operating results;
- actual or anticipated developments in our business, our competitors' businesses or the competitive landscape generally;
- legal proceedings, enforcement actions or regulatory inquiries relating to us or our competitors or to the markets in which we operate;
- developments or disputes concerning our intellectual property or other proprietary rights;

- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business or the markets in which we operate;
- changes in accounting standards, policies, guidelines, interpretations or principles;
- changes in our management; and
- general economic conditions and trends, including slow or negative growth of our markets.

In addition, in the past, following periods of volatility in the overall market and the market price of a particular company's securities, securities class action litigation has often been instituted against these companies. If instituted against us, any such litigation, regardless of its merit or final outcome, could result in substantial costs and a diversion of our management's attention, thereby adversely affecting our operating results and, potentially, the price of our Class A common stock.

The dual class structure of our common stock has the effect of concentrating voting control with a limited number of stockholders, including our executive officers, directors and principal stockholders, which will limit your ability to influence corporate matters.

Our Class B common stock has 10 votes per share, and our Class A common stock has one vote per share. At December 31, 2019, the holders of the outstanding shares of our Class B common stock, including our executive officers, directors, and principal stockholders, collectively hold approximately 91% of the combined voting power of our outstanding capital stock. Because of the 10-to-1 voting ratio between our Class B common stock and Class A common stock, the holders of our Class B common stock collectively control a majority of the combined voting power of our outstanding capital stock and therefore are able to exercise significant influence and control over the establishment and implementation of our future business plans and strategic objectives, as well as to control all matters submitted to our stockholders for approval. These persons may manage our business in ways with which you disagree and which may be adverse to your interests. This concentrated control may also have the effect of delaying, deterring or preventing a change-in-control transaction, depriving our stockholders of an opportunity to receive a premium for their capital stock or negatively affecting the market price of our Class A common stock.

Transfers by holders of our Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions. The conversion of our Class B common stock to Class A common stock will have the effect, over time, of increasing the relative voting power of the holders of our Class B common stock who retain their shares over the long term.

We cannot predict the impact that our capital structure may have on our stock price.

S&P Dow Jones, a provider of widely followed stock indices, has announced that companies with multiple classes of stock, will not be eligible for inclusion in certain of their indices. As a result, our Class A common stock will not be eligible for those stock indices. Additionally, FTSE Russell, another provider of widely followed stock indices, requires new constituents of its indices to have at least five percent of their voting rights in the hands of public stockholders. At December 31, 2019, the holders of the outstanding shares of our Class B common stock, including our executive officers, directors, and principal stockholders, collectively hold approximately 91% of the combined voting power of our outstanding capital stock. Many investment funds are precluded from investing in companies that are not included in such indices, and these funds would be unable to purchase our Class A common stock. We cannot assure you that other stock indices will not take a similar approach in the future. Exclusion from indices could make our Class A common stock less attractive to investors and, as a result, the market price of our Class A common stock could be adversely affected.

In addition, several shareholder advisory firms have announced their opposition to the use of multiple class structures. As a result, the dual class structure of our common stock may cause shareholder advisory firms to publish negative commentary about our corporate governance practices or otherwise seek to cause us to change our capital structure. Any actions or publications by shareholder advisory firms critical of our corporate governance practices or capital structure could also adversely affect the value of our Class A common stock.

Share repurchases could increase the volatility of the trading price of our common stock and diminish our cash reserves, and we cannot guarantee that our share repurchase program will enhance long-term stockholder value.

In October 2018, our Board of Directors adopted a \$30.0 million Share Repurchase Program relating to our outstanding shares of our Class A common stock. In February 2019, our Board of Directors adopted a \$100.0 million Share Repurchase

Program relating to our outstanding shares of our Class A common stock, which is inclusive of, and not in addition to, the remaining availability under the October 2018 authorization. Although our Board of Directors has authorized the Repurchase Program, it does not obligate us to repurchase any specific dollar amount or number of shares, there is no expiration date for the Repurchase Program, and the Repurchase Program may be modified, suspended or terminated at any time and for any reason. The timing and actual number of shares repurchased under the Repurchase Program will depend on a variety of factors, including the acquisition price of the shares, our liquidity position, general market and economic conditions, legal and regulatory requirements and other considerations. Our ability to repurchase shares may also be limited by restrictive covenants in our existing credit agreement or in future borrowing arrangements we may enter into from time to time.

Repurchases of our shares could increase the volatility of the trading price of our shares, which could have a negative impact on the trading price of our shares. Similarly, the future announcement of the termination or suspension of the Repurchase Program, or our decision not to utilize the full authorized repurchase amount under the Repurchase Program, could result in a decrease in the trading price of our shares. In addition, the Repurchase Program could have the impact of diminishing our cash reserves, which may impact our ability to finance our growth, complete acquisitions and execute our strategic plan. There can be no assurance that any share repurchases we do elect to make will enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased our shares. Although our share repurchase program is intended to enhance long-term stockholder value, we cannot guarantee that it will do so and short-term stock price fluctuations could reduce the effectiveness of the Repurchase Program.

Anti-takeover provisions contained in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could impair a takeover attempt.

Our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could have the effect of rendering more difficult hostile takeovers, change-in-control transactions or changes in our Board of Directors or management. Among other things, these provisions:

- authorize the issuance of preferred stock with powers, preferences and rights that may be senior to our common stock, which can be created and issued by our Board of Directors without prior stockholder approval;
- provide for the adoption of a staggered Board of Directors whereby our board is divided into three classes, each of which has a different three-year term;
- provide that the number of directors will be fixed by our Board of Directors;
- prohibit our stockholders from filling vacancies on our Board of Directors;
- provide for the removal of a director only for cause and then only by the affirmative vote of the holders of a majority of the combined voting power of our outstanding capital stock;
- prohibit stockholders from calling special stockholder meetings;
- prohibit stockholders from acting by written consent without holding a meeting of stockholders;
- require the vote of at least two-thirds of the combined voting power of our outstanding capital stock to approve amendments to our certificate of incorporation or bylaws;
- require advance written notice of stockholder proposals and director nominations;
- provide for a dual-class common stock structure, as discussed above; and
- require the approval of the holders of at least a majority of the outstanding shares of our Class B common stock, voting as a separate class, prior to consummating a change-in-control transaction.

As a Delaware corporation, we are also subject to provisions of Delaware law, including Section 203 of the Delaware General Corporation Law, which may delay, deter or prevent a change-in-control transaction. Section 203 imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15% or more of our common stock.

Any provision of Delaware law, our amended and restated certificate of incorporation, or our amended and restated bylaws, that has the effect of rendering more difficult, delaying, deterring or preventing a change-in-control transaction could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock, and could also affect the price that some investors are willing to pay for our Class A common stock.

Future sales of shares of our Class A common stock, or the perception that these sales could occur, could depress the market price of our Class A common stock.

Sales of a substantial number of shares of our Class A common stock in the public market, or the perception that these sales might occur, could cause the market price of our Class A common stock to decline or make it more difficult for you to sell your Class A common stock at a time and price that you deem appropriate, and could impair our ability to raise capital through the sale of additional equity securities. We are unable to predict the effect that sales, or the perception that our shares may be available for sale, will have on the prevailing market price of our Class A common stock.

At December 31, 2019, we had an aggregate of 1.3 million options outstanding that, if fully exercised, would result in the issuance of additional shares of Class A common stock or Class B common stock, as applicable. Our Class B common stock converts into Class A common stock on a one-for-one basis. In addition, at December 31, 2019, we had 0.6 million restricted stock units ("RSUs"), outstanding which, if fully vested and settled in shares, would result in the issuance of additional shares of Class A common stock. All of the shares of Class A common stock issuable upon the exercise of options (or upon conversion of shares of Class B common stock issued upon the exercise of options), or upon the vesting and settlement of RSUs, have been registered for public resale under the Securities Act. Accordingly, these shares will be able to be freely sold in the public market upon issuance.

Certain holders of our Class A common stock and Class B common stock have rights, subject to certain conditions, to require us to file registration statements for the public resale of such shares (in the case of Class B common stock, the Class A common stock issuable upon conversion of such shares) or to include such shares in registration statements that we may file for us or other stockholders. Any sales of securities by these stockholders could have a material adverse effect on the market price of our Class A common stock.

If securities or industry analysts do not publish or cease publishing research or reports about us, our business, our market or our competitors, or if they adversely change their recommendations regarding our Class A common stock, the market price and trading volume of our Class A common stock could decline.

The trading market for our Class A common stock is influenced, to some extent, by the research and reports that securities or industry analysts may publish about us, our business, our market or our competitors. If any of the analysts who cover us adversely change their recommendations regarding our Class A common stock or provide more favorable recommendations about our competitors, the market price of our Class A common stock may decline. If any of the analysts who cover us were to cease coverage of us or fail to regularly publish reports, we could lose visibility in the financial markets, which in turn could cause the market price and trading volume of our Class A common stock to decline.

We do not expect to declare any dividends in the foreseeable future.

We have never declared or paid any cash dividends on our existing common stock. We do not anticipate declaring or paying any cash dividends to holders of our Class A common stock in the foreseeable future and intend to retain all future earnings for use in the growth of our business. In addition, the terms of our Credit Agreement restrict our ability to pay dividends. Consequently, investors may need to rely on sales of our Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors should not purchase our Class A common stock with the expectation of receiving cash dividends.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our corporate headquarters is located in three adjacent office buildings in Santa Barbara, California. The lease on the first building covers approximately 43,700 square feet, the lease on the second building covers approximately 86,000 square feet, and the lease on the third building covers approximately 35,900 square feet. These leases expire in February 2032 and may be extended for two additional five-year terms at our election.

We also lease space in San Diego, California; Venice, California; Plano, Texas; Richardson, Texas; and Boston, Massachusetts under leases that expire at various times between 2020 and 2024 with various term extensions available.

We intend to procure additional space as we add employees and expand our operations geographically. We believe our current facilities are adequate for our current needs and that, should it be needed, suitable additional or alternative space will be available to us to accommodate any such expansion of our operations.

We lease all of our facilities and do not own any real property.

ITEM 3. LEGAL PROCEEDINGS

From time to time, we are involved in various investigatory inquiries or legal proceedings arising from or related to matters incident to the ordinary course of our business activities, including without limitation actions involving intellectual property, employment, regulatory and contractual issues. Although the results of such investigatory inquiries or legal proceedings cannot be predicted with certainty, we believe that we are not currently a party to any investigatory inquiries or legal proceeding(s) which, 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. However, regardless of the merit of any claims raised or the ultimate outcome, investigatory inquiries or legal proceedings may generally have an adverse impact on us as a result of compliance or defense and settlement costs, diversion of management resources, and other factors.

For additional information regarding legal proceedings, refer to Note 10, *Commitments and Contingencies* of our Consolidated Financial Statements.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market for our Common Stock

Our Class A common stock began trading publicly on the NASDAQ Global Market under the symbol "APPF" on June 26, 2015. Prior to that date, there was no public trading market for our Class A common stock.

Our Class B common stock is not listed or traded on any stock exchange.

Holders of Record

At February 14, 2020, there were 27 holders of record of our Class A common stock and 80 holders of record of our Class B common stock. Because many of our shares of Class A common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

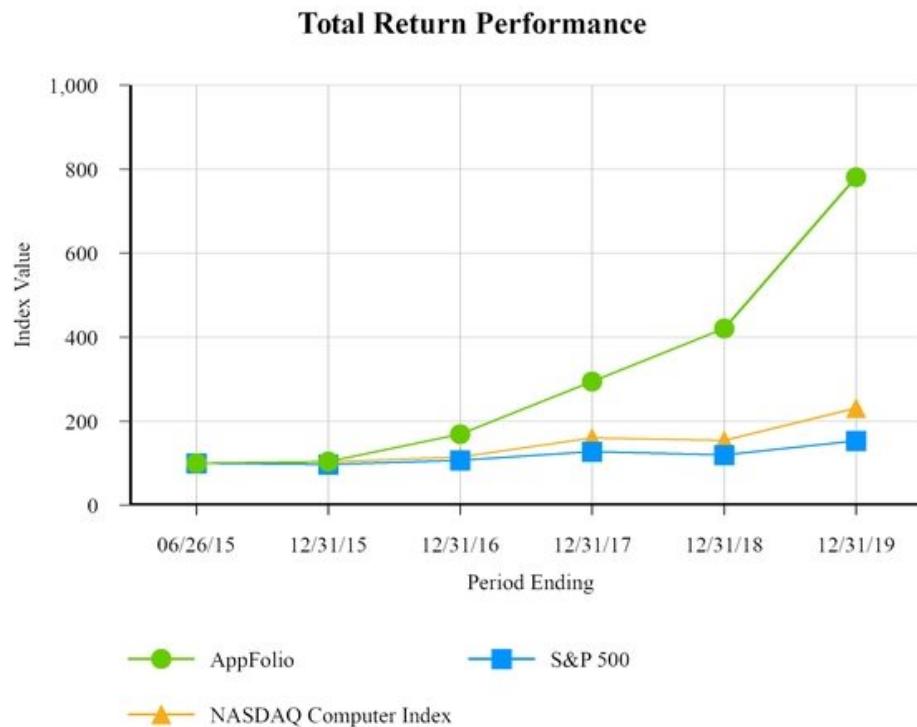
Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We do not anticipate declaring or paying any cash dividends to holders of our capital stock in the foreseeable future and intend to retain all future earnings for use in the growth of our business. In addition, the terms of our Credit Agreement restrict our ability to pay dividends. Consequently, investors may need to rely on sales of our Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors should not purchase our Class A common stock with the expectation of receiving cash dividends.

Stock Performance Graph

The following performance graph compares the cumulative total return on our Class A common stock with that of the S&P 500 Index and the NASDAQ Computer Index. This chart assumes \$100 was invested in our Class A common stock at the close of market on June 26, 2015, which was our initial trading day, and in the S&P 500 Index and the NASDAQ Computer Index, and assumes the reinvestment of any dividends.

The comparisons in the graph below are based upon historical data and are not indicative of, nor intended to forecast, future performance of our common stock.



This performance graph shall not be deemed “filed” for purposes of Section 18 of the Exchange Act or incorporated by reference into any of our other filings under the Securities Act or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Unregistered Sales of Equity Securities

None.

ITEM 6. SELECTED FINANCIAL DATA

The following tables present our historical selected consolidated financial data for the periods indicated. We have derived the selected Consolidated Statements of Operations data for the fiscal years ended December 31, 2019, 2018 and 2017 and the selected Consolidated Balance Sheet data at December 31, 2019 and 2018 from our audited Consolidated Financial Statements included elsewhere in this Annual Report. We have derived the selected Consolidated Statements of Operations data for the fiscal years ended December 31, 2016 and 2015 and the selected Consolidated Balance Sheet data at December 31, 2017, 2016 and 2015 from our audited Consolidated Financial Statements, which are not included in this Annual Report. Our historical results are not necessarily indicative of the results we expect in the future.

The following historical selected consolidated financial data should be read in conjunction with, and are qualified in their entirety by reference to, the section of this Annual Report entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our Consolidated Financial Statements and the related notes included elsewhere in this Annual Report.

	Year Ended December 31,				
	2019 ⁽¹⁾	2018 ⁽²⁾	2017	2016	2015
(in thousands, except per share data)					
Consolidated Statements of Operations Data:					
Revenue	\$ 256,012	\$ 190,071	\$ 143,803	\$ 105,586	\$ 74,977
Costs and operating expenses:					
Cost of revenue (exclusive of depreciation and amortization) ⁽³⁾	101,642	73,549	55,283	44,630	33,903
Sales and marketing ⁽³⁾	51,528	33,288	28,709	28,827	26,076
Research and product development ⁽³⁾	39,508	24,111	16,578	12,638	9,554
General and administrative ⁽³⁾	34,478	24,891	21,199	17,979	14,343
Depreciation and amortization	22,395	14,576	12,699	9,935	6,104
Total costs and operating expenses	<u>249,551</u>	<u>170,415</u>	<u>134,468</u>	<u>114,009</u>	<u>89,980</u>
Income (loss) from operations	6,461	19,656	9,335	(8,423)	(15,003)
Other income (expense), net	16	(56)	(96)	(37)	5
Interest (expense) income, net	(1,654)	787	535	246	(595)
Income (loss) before provision for income taxes	4,823	20,387	9,774	(8,214)	(15,593)
Provision for (benefit from) income taxes	(31,459)	420	58	67	75
Net income (loss)	<u>\$ 36,282</u>	<u>\$ 19,967</u>	<u>\$ 9,716</u>	<u>\$ (8,281)</u>	<u>\$ (15,668)</u>
Net income (loss) per common share:					
Basic	1.07	0.59	0.29	(0.25)	(0.73)
Diluted	1.02	0.56	0.28	(0.25)	(0.73)
Weighted average common shares outstanding:					
Basic	34,016	34,128	33,849	33,561	21,336
Diluted	35,567	35,562	35,151	33,561	21,336

⁽¹⁾ We acquired Dynasty on January 7, 2019. The results of Dynasty have been included in our results of operations from the date of acquisition. Refer to Note 3, *Business Combinations* of our Consolidated Financial Statements included elsewhere in this Annual Report for additional information regarding this transaction.

⁽²⁾ We acquired WegoWise on August 31, 2018. The results of WegoWise have been included in our results of operations from the date of acquisition. Refer to Note 3, *Business Combinations* of our Consolidated Financial Statements included elsewhere in this Annual Report for additional information regarding this transaction.

⁽³⁾ The following table presents stock-based compensation expense included in each respective expense category:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
(in thousands)					
Stock-based compensation expense included in costs and operating expenses:					
Cost of revenue (exclusive of depreciation and amortization)	\$ 1,466	\$ 1,103	\$ 725	\$ 471	\$ 124
Sales and marketing	1,271	1,034	723	442	115
Research and product development	1,411	1,079	657	382	41
General and administrative	3,161	3,121	3,991	3,006	727
Total stock-based compensation expense	\$ 7,309	\$ 6,337	\$ 6,096	\$ 4,301	\$ 1,007

	At December 31,				
	2019	2018	2017	2016	2015
(in thousands)					
Consolidated Balance Sheet Data:					
Cash and cash equivalents and investment securities	\$ 50,778	\$ 101,963	\$ 68,310	\$ 52,860	\$ 56,715
Capitalized software, net	30,023	20,485	17,609	15,539	10,021
Total assets	260,102	175,741	110,248	92,583	90,481
Deferred revenue	4,586	3,414	7,080	7,638	4,953
Current and long-term debt, net	48,583	49,815	—	—	—
Total stockholders' equity	131,950	91,846	85,079	69,682	72,697

ITEM 7. 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 together with our Consolidated Financial Statements and the related notes included elsewhere in this Annual Report. This discussion and analysis contains forward-looking statements that are based on our current expectations and reflect our plans, estimates and anticipated future financial performance. See the section of this Annual Report entitled "Cautionary Note Regarding Forward-Looking Statements" for additional information. These statements involve numerous risks and uncertainties. Our actual results may differ materially from those expressed or implied by these forward-looking statements as a result of many factors, including those set forth in the section of this Annual Report entitled "Risk Factors".

The following discussion and analysis of our financial condition and results of operations discusses 2019 and 2018 items and year-over-year comparisons between 2019 and 2018. For discussion of 2017 items and year-over-year comparisons between 2018 and 2017, refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of our Annual Report on Form 10-K for the year ended December 31, 2018.

Overview

Our mission is to revolutionize vertical industry businesses by providing great software and services. To that end, today we offer industry-specific, cloud-based business software solutions, services and data analytics to the real estate market, which represents over 90% of our revenue, and, to a lesser extent, to the legal market. Although specific functionality varies by product, our core solutions address common business operations and interactions of businesses in our targeted verticals. In addition to our core solutions, we offer a range of optional, but often business-critical, Value+ services. Our Value+ services are built to enhance, automate and streamline property management processes and support workflows essential to our customers' businesses.

Our real estate software solutions provide our property management customers (including third-party property managers and owner-operators who manage single- and multi-family residences, community associations, commercial properties, and student housing, as well as mixed real estate portfolios) with a system of record to automate essential business processes, a system of engagement to enhance business interactions between our customers and their clients and other stakeholders, and a system of intelligence designed to leverage data to predict and optimize business workflows in order to enable superior customer experiences and increase efficiency across our customers' businesses. Our mobile-optimized software solutions are designed for use across multiple devices and operating systems. Our software solutions are all offered as a service for our customers and hosted using a

modern cloud-based architecture. This architecture leads to rich data sets that have a consistent schema across our customer base and enables us to deploy data-powered products and services for our customers. We also provide software solutions to the legal market that enable law firms to administer their practice and manage their caseloads more efficiently by centralizing case details in a single system of record and system of engagement.

We have focused on growing our revenue by increasing the size of our customer base in the markets we serve, increasing the number of units under management, introducing new or expanded Value+ services, retaining customers, and increasing the adoption and utilization of our Value+ services by new and existing customers. We evaluate the success of our business during the periods presented based on factors such as the development and launch of new and innovative core functionality and Value+ services, enhancements to user experience, customer satisfaction, growth in our revenue and customer base, fluctuations in costs and operating expenses as a percentage of revenue, operating loss or income and cash flows from operating activities.

To date, we have experienced rapid revenue growth due to our investments in research and product development, sales and marketing, customer service and support, and infrastructure. We intend to continue to invest in growth across our organization as we expand in our current and adjacent markets and into new verticals. These investments to grow our business will continue to increase our costs and operating expenses on an absolute basis. Many of these investments will occur in advance of our realization of revenue or any other benefit, which will make it difficult to determine if we are allocating our resources effectively and efficiently. We expect our operating margins will improve over the long term, but this trend may be interrupted from time to time as a result of accelerated investment opportunities occurring in advance of realization of revenue.

We have managed, and plan to continue to manage, our business towards the achievement of long-term growth that we believe will positively impact long-term stockholder value, and not towards the realization of short-term financial or business metrics, or short-term stockholder value. We have invested, and intend to continue to invest, in our business to capitalize on our market opportunity. Accordingly, if opportunities arise that might cause us to sacrifice our performance with respect to short-term financial or business metrics, but that we believe are in the best interests of our stockholders in the long term, we will take those opportunities.

At December 31, 2019, we had approximately 1,240 employees, and we consider our relationship with them to be very good. We also hire temporary employees and consultants, and feel similarly about our relationships with them. None of our employees is represented by a labor union or covered by a collective bargaining agreement.

Real Estate Overview

In 2008, we entered the real estate market with our first product, APM, a property management solution designed to address the unique operational and business requirements of property management companies. Recognizing that our customers and their stakeholders would benefit from additional business critical services, we launched a series of Value+ services beginning in 2009. Our first Value+ service assisted our customers in the marketing of their rental properties by offering property level website design and hosting services. In 2010, we commenced the roll out of our electronic payment services, thereby facilitating the payment of rent via ACH by tenants. In 2011, we launched tenant screening services, further assisting our customers with the leasing process. In 2012, we introduced our legal liability to landlord insurance program, which protects property owners and managers from certain defined losses. In 2013, we expanded our electronic payment services by allowing residents to pay rent by ECP and credit or debit card. In 2014, we launched a tenant-facing contact center solution to assist our property managers with resolving incoming maintenance requests. In 2015, we expanded the marketing services offered to our property management customers with a premium leads service built on technology acquired with our acquisition of RentLinx and expanded our electronic payment services to facilitate payments made between our customers and property owners and vendors. In 2016, we introduced a tenant debt collection Value+ service to assist our property managers with running a more efficient business. In 2017, we expanded our insurance services to enable tenants to purchase renters insurance from within APM, protecting both our property management customers and their tenants. In 2018, we acquired substantially all of the assets of WegoWise, a provider of cloud-based utility analytics software solutions, and began offering AppFolio Utility Management as a Value+ service to our property management customers in mid-2019. In 2018, we also released APM PLUS, a new tier of APM designed for larger businesses with more complex needs. APM PLUS builds upon the functionality of APM and additionally offers data analytics, configurable workflows, and revenue management and optimization functionality for our customers. In January 2019, we acquired Dynasty, a provider of advanced AI solutions for the real estate market, and began offering an AI Leasing Assistant, Lisa, as a Value+ service to our property management customers in mid-2019. In April 2019, we launched AppFolio Investment Management, which enables real estate investment managers to better manage their investor relationships by increasing transparency and streamlining certain business processes.

Over 90% of our annual revenue is derived directly and indirectly from the software solutions, services and data analytics we offer to the real estate market. The significant majority of our customers in the real estate market use our property management solutions. We define our property management customer base as the number of customers subscribing to our property management core solutions. Customer count and property management units under management are presented in the table below:

	Quarter Ended							
	December 31,	September 30,	June 30,	March 31,	December 31,	September 30,	June 30,	March 31,
	2019				2018			
Property management customers	14,385	14,034	13,737	13,409	13,046	12,641	12,317	12,030
Property management units under management (in millions)	4.64	4.41	4.23	4.08	3.91	3.7	3.55	3.4

Legal Overview

We entered the legal market with the acquisition of MyCase in 2012. In 2013, we introduced website design and hosting services, our first Value+ service for our legal market customers, designed to assist smaller law firms and solo practitioners with the marketing of their practices, electronic storage of case information and communications. In 2016, we launched electronic payments services for the legal market, which streamlined the billing and receivables process through MyCase. Similar to our offerings in the real estate market, our software solutions and Value+ services in the legal market are subject to strict legal, regulatory and other requirements. Please refer to Item 1A., "Risk Factors", for a more complete discussion of these and other risk-related issues.

Our legal customers directly and indirectly account for less than 10% of our annual revenue. We define our legal customer base as the number of customers subscribing to MyCase core solutions, exclusive of free trial periods. Legal customer count is summarized in the table below:

	Quarter Ended							
	December 31,	September 30,	June 30,	March 31,	December 31,	September 30,	June 30,	March 31,
	2019				2018			
Law firm customers	10,971	10,781	10,631	10,485	10,279	10,173	10,001	9,706

Key Components of Results of Operations

Revenue

We charge our customers on a subscription basis for our core solutions and certain of our Value+ services. Our subscription fees are designed to scale to the size of our customers' businesses. We recognize subscription revenue over time on a straight-line basis over the contract term beginning on the date that our service is made available to the customer. We generally invoice our customers for subscription services in monthly or annual installments, typically in advance of the subscription period. Revenue from subscription services is impacted by a number of factors, including the change in the number and type of our customers, the size and needs of our customers' businesses, our customer renewal rates, pricing for our solutions, and the level of adoption of our Value+ subscription services by new and existing customers.

We also charge our customers usage-based fees for using certain Value+ services. Certain of the usage-based fees are paid by either our customers or clients of our customers. Usage-based fees are charged on a flat fee per transaction basis with no minimum usage commitments. We recognize revenue for usage-based services in the period the service is rendered. We generally invoice our customers for usage-based services on a monthly basis for services rendered in the preceding month. Revenue from usage-based services is impacted by a number of factors, including the number of new and existing customers that adopt and utilize our Value+ services, the size and needs of our customers, and our customer renewal rates.

We experience limited seasonality in our Value+ services revenue, primarily with respect to certain leasing-related services we provide to our property management customers, including our tenant screening services and new tenant applications which impact electronic payment services revenue. Our property management customers historically have processed fewer applications for new tenants during the fourth quarter. As a result of this seasonal decline in activity, we have typically experienced overall slower sequential revenue growth or a sequential decline in revenue in the fourth quarter of each of our most recent fiscal years. We expect this seasonality to continue in the foreseeable future. .

We offer assistance to our customers with on-boarding to our core solutions, as well as website design services. We generally invoice our customers for these other services in advance of the services being completed. We recognize revenue for these other services upon completion of the related service. We generate revenue from RentLinx, WegoWise, and Dynasty stand-alone customers by providing services outside of our property management core solution platform. Revenue derived from customers using these services is recorded in Other revenue.

Costs and Operating Expenses

Cost of Revenue. Cost of revenue consists of fees paid to third-party service providers associated with delivering certain of our Value+ services (including legal fees and costs associated with the delivery and provision of those services, as well as loss reserves and other costs associated with our legal liability to landlord insurance services), personnel-related costs (including salaries, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on customer service and the support of our operations, platform infrastructure costs (such as data center operations and hosting-related costs), payment processing fees and allocated shared and other costs. Cost of revenue excludes depreciation of property and equipment, and amortization of capitalized software development costs and intangible assets. We intend to continue to invest in customer service and support, and the expansion of our technology infrastructure as we grow the number of our customers, enter new markets, and offer additional Value+ services. These investments could impact cost of revenue both in absolute dollars and as an overall percentage of revenue.

Sales and Marketing. Sales and marketing expense consists of personnel-related costs (including salaries, sales commissions, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on sales and marketing, costs associated with sales and marketing activities, and allocated shared costs. Marketing activities include advertising, online lead generation, lead nurturing, customer and industry events, and the creation of industry-related content and collateral. Sales commissions and other incremental costs to acquire customers and grow adoption and utilization of our Value+ services by our new and existing customers are deferred and then amortized on a straight-line basis over a period of benefit, that we have determined to be three years. We focus our sales and marketing efforts on generating awareness of our software solutions, creating sales leads, establishing and promoting our brands, and cultivating an educated community of successful and vocal customers. We intend to continue to invest in sales and marketing to increase our customer base in new and existing markets, and increase the adoption and utilization of Value+ services by our new and existing customers.

Research and Product Development. Research and product development expense consists of personnel-related costs (including salaries, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on research and product development, fees for third-party development resources, and allocated shared costs. Our research and product development efforts are focused on enhancing functionality and the ease of use of our existing software solutions by adding new core functionality, Value+ services and other improvements, as well as developing new products and services for new and existing markets. We capitalize our software development costs which meet the criteria for capitalization. Amortization of capitalized software development costs is included in depreciation and amortization expense. We intend to continue to invest in research and product development as we continue to introduce new core functionality, roll out new Value+ services, develop new products and services, and expand into adjacent markets, and new verticals.

General and Administrative. General and administrative expense consists of personnel-related costs (including salaries, a majority of total incentive-based compensation, benefits, and stock-based compensation) for employees in our executive, finance, information technology, human resources, corporate development, legal, and administrative organizations. In addition, general and administrative expense includes fees for third-party professional services (including audit, legal, tax, and consulting services), transaction costs related to business combinations, other corporate expenses, and allocated shared costs. We intend to continue to incur incremental general and administrative costs associated with supporting the growth of our business.

Depreciation and Amortization. Depreciation and amortization expense includes depreciation of property and equipment, amortization of capitalized software development costs, and amortization of intangible assets. We depreciate or amortize property and equipment, software development costs, and intangible assets over their expected useful lives on a straight-line basis, which approximates the pattern in which the economic benefits of the assets are consumed. As we continue to invest in our research and product development organization and the development or acquisition of new technology, we expect to have increased capitalized software development costs and incremental amortization. Further, we may incur additional amortization expense to the extent we enter into additional arrangements to acquire or invest in new technologies or markets adjacent to those we serve today or entirely new verticals. Finally, as we expand our facilities footprint and increase our base of employees, we expect to have increased property and equipment expenditures and incremental depreciation expense.

Interest Income (Expense), Net. Interest income includes interest earned on investment securities, amortization and accretion of the premium and discounts paid from the purchase of investment securities, and interest earned on notes receivable and on cash deposited in our bank accounts. Interest expense includes interest paid on outstanding borrowings under the credit agreement with Wells Fargo, as administrative agent, and the lenders that are parties thereto, ("the Credit Agreement").

Provision for (Benefit from) Income Taxes. Provision for (benefit from) income taxes consists of federal and state income taxes in the United States and a non-cash benefit related to the release of the valuation allowance for our deferred tax assets.

Results of Operations for the Years Ended December 31, 2019 and 2018

The following table presents our results of operations for the periods presented in dollars (in thousands) and as a percentage of revenue:

Consolidated Statements of Operations Data:	Year Ended December 31,			
	2019		2018	
	Amount	%	Amount	%
Revenue	\$ 256,012	100.0 %	\$ 190,071	100.0 %
Costs and operating expenses:				
Cost of revenue (exclusive of depreciation and amortization) ⁽¹⁾	101,642	39.7	73,549	38.7
Sales and marketing ⁽¹⁾	51,528	20.1	33,288	17.5
Research and product development ⁽¹⁾	39,508	15.4	24,111	12.7
General and administrative ⁽¹⁾	34,478	13.5	24,891	13.1
Depreciation and amortization	22,395	8.7	14,576	7.7
Total costs and operating expenses	249,551	97.5	170,415	89.7
Income from operations	6,461	2.5	19,656	10.3
Other income (expense), net	16	—	(56)	—
Interest income (expense), net	(1,654)	(0.6)	787	0.4
Income before provision for (benefit from) income taxes	4,823	1.9	20,387	10.7
Provision for (benefit from) income taxes	(31,459)	(12.3)	420	0.2
Net income	\$ 36,282	14.2 %	\$ 19,967	10.5 %

⁽¹⁾ The following table presents stock-based compensation expense included in each respective expense category:

Stock-based compensation expense included in costs and operating expenses:	Year Ended December 31,			
	2019		2018	
Cost of revenue (exclusive of depreciation and amortization)	\$ 1,466	\$ 1,103		
Sales and marketing		1,271	\$ 1,034	
Research and product development		1,411	1,079	
General and administrative		3,161	3,121	
Total stock-based compensation expense	\$ 7,309	\$ 6,337		

Revenue

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Core solutions	\$ 88,581	\$ 70,549	26%
Value+ services	153,994	113,072	36%
Other	13,437	6,450	108%
Total revenue	<u>\$ 256,012</u>	<u>\$ 190,071</u>	<u>35%</u>

In each of the fiscal years presented above, we derived over 90% of our annual revenue directly and indirectly from the software solutions, services and data analytics we offer to our real estate market customers. The significant majority of our customers in the real estate market use our property management solutions.

Total revenue was \$256.0 million for fiscal 2019, compared to \$190.1 million for the fiscal year ended December 31, 2018, or fiscal 2018, an increase of \$65.9 million, or 35%. Core solutions revenue was \$88.6 million for fiscal 2019 compared to \$70.5 million for fiscal 2018, an increase of \$18.1 million, or 26%. Value+ services revenue was \$154.0 million for fiscal 2019 compared to \$113.1 million for fiscal 2018, an increase of \$40.9 million, or 36%. Other revenue was \$13.4 million for fiscal 2019, compared to \$6.5 million for fiscal 2018, an increase of \$6.9 million or 108%.

The majority of our revenue is derived from our property management core solutions and Value+ services utilized by property managers, residents, applicants and owners. The increase in core solutions and Value+ services revenue was mainly attributed to a growing base of property management customers. During this period, we experienced a 19% year over year increase in the number of property management units under management resulting from a 10% year over year increase in the number of property management customers. In addition, our property managers, residents, applicants and owners increased their usage of our Value+ services. A significant majority of our Value+ services revenue comes directly and indirectly from our customers' use of our Electronic Payment Services, Tenant Screening Services, and Insurance Services. During the period, we also introduced new Value+ services and expanded the functionality of others, which enables new revenue streams. The increase in Other revenue was primarily attributed to revenue generated from our real estate-related acquisitions and from an increase in fees associated with our property management customers upgrading to a new website hosting platform.

Cost of Revenue (Exclusive of Depreciation and Amortization)

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Cost of revenue (exclusive of depreciation and amortization)	\$ 101,642	\$ 73,549	38%
Percentage of revenue		39.7%	38.7%
Stock-based compensation, included above	\$ 1,466	\$ 1,103	33%

Cost of revenue (exclusive of depreciation and amortization) was \$101.6 million for fiscal 2019, compared to \$73.5 million for fiscal 2018, an increase of \$28.1 million, or 38%. This increase in cost of revenue (exclusive of depreciation and amortization) was primarily attributed to the 35% increase in revenue over the same period.

Expenditures to third-party service providers, related to the delivery of our Value+ services, increased \$13.1 million directly associated with the increased adoption and utilization of our Value+ services, as evidenced by the 36% increase in Value+ services revenue. Our third-party service provider expenses include costs associated with the delivery and provision of Value+ services, as well as loss reserves, legal fees and other costs associated with our insurance services. There was also an increase in personnel-related costs of \$11.5 million, related to increased headcount to support the increased number of customers, including those acquired in our recent acquisitions and investments made for the future growth of our business. Allocated and other costs increased by \$3.5 million primarily driven by an increase in facilities, platform infrastructure, payment processing related to customer receivables and other costs incurred in support of our overall growth, as well as costs associated with the delivery and provision of our Value+ services. This increase in allocated and other costs was partially offset by a decrease in legal fees and costs associated with settling a litigation matter, net of expected insurance proceeds of \$1.1 million which was included in cost of revenue (exclusive of depreciation and amortization) in fiscal 2018.

As a percentage of revenue, cost of revenue (exclusive of depreciation and amortization) fluctuates primarily based on the mix and prices of Value+ services in the period, and investments made in advance of expected revenue generation. For fiscal 2019 compared to fiscal 2018, cost of revenue (exclusive of depreciation and amortization), as a percentage of revenue, increased to 39.7% from 38.7%. This increase in cost as a percentage of revenue was primarily due to increased personnel-related investments made in advance of expected revenue generation associated with growth initiatives.

Sales and Marketing

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Sales and marketing	\$ 51,528	\$ 33,288	55%
Percentage of revenue	20.1%	17.5%	
Stock-based compensation, included above	1,271	1,034	23%

Sales and marketing expense was \$51.5 million for fiscal 2019, compared to \$33.3 million for fiscal 2018, an increase of \$18.2 million, or 55%. This increase was primarily due to an increase in personnel-related costs of \$13.0 million driven by an increase in the average headcount to support our growth, the impact of adoption of Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"), and an increase in investments made in advance of expected revenue generation. Under ASU 2014-09, sales commissions and other incremental costs to acquire customers are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to be three years. Given we are in the second year of adoption, we have higher expense associated with sales commissions when compared to the prior period. There was also an increase in advertising and promotion costs of \$2.4 million related to our new and expanding service offerings. In addition, there was an increase in allocated and other costs of \$2.8 million driven by an increase in consulting services, IT and other costs incurred in support of our overall growth in personnel.

As a percentage of revenue, sales and marketing expense increased to 20.1% from 17.5% for fiscal 2019 compared to fiscal 2018. This increase was primarily driven by personnel-related investments, the expense impact related to being in our second year of adoption of ASU 2014-09, and investments made in advance of expected revenue generation from growth initiatives in the business.

Research and Product Development

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Research and product development	\$ 39,508	\$ 24,111	64%
Percentage of revenue	15.4%	12.7%	
Stock-based compensation, included above	1,411	1,079	31%

Research and product development expense was \$39.5 million for fiscal 2019, compared to \$24.1 million for fiscal 2018, an increase of \$15.4 million, or 64%. This increase was the result of an increase in personnel-related costs, net of capitalized software development costs, of \$10.5 million due to investments in headcount growth within our research and product development organization, and an increase in allocated and other costs of \$4.9 million driven by an increase in facilities, IT and other costs incurred in support of our overall growth in personnel.

We intend to continue to invest in research and product development as we continue to introduce additional functionality into our software solutions, services and data offerings, develop or integrate acquired Value+ services to attract new customers and expand offerings to existing customers, develop new products to serve new or existing customers and expand into adjacent markets or new verticals.

General and Administrative

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
General and administrative	\$ 34,478	\$ 24,891	39%
Percentage of revenue	13.5%	13.1%	
Stock-based compensation, included above	3,161	3,121	1%

General and administrative expense was \$34.5 million for fiscal 2019, compared to \$24.9 million for fiscal 2018, an increase of \$9.6 million, or 39%. This increase was primarily due to an increase in personnel-related costs of \$6.9 million, and an increase in professional services fees and allocated and other costs of \$2.6 million related to expanded audit services, legal and other services fees associated with compliance with Section 404(b) of SOX, increased leasing activities, due diligence and acquisition related activities, as well as other costs incurred to support our growth. The increase in personnel-related costs was primarily due to headcount growth.

We expect equity denominated performance-based compensation will continue to decrease for certain executives with the introduction of a Long-Term Cash Bonus Plan, adopted in fiscal 2018. No accrual has yet been made under this plan as a result of the high level of uncertainty regarding potential future payments under the plan.

Depreciation and Amortization

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Depreciation and amortization	\$ 22,395	\$ 14,576	54%
Percentage of revenue	8.7%	7.7%	

Depreciation and amortization expense was \$22.4 million for fiscal 2019, compared to \$14.6 million for fiscal 2018, an increase of \$7.8 million, or 54%. This increase was primarily due to increased amortization expense associated with intangible assets acquired from WegoWise and Dynasty, and increased amortization expense associated with higher accumulated capitalized software development balances.

Interest Income (Expense), net

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Interest income (expense), net	\$ (1,654)	\$ 787	(311)%
Percentage of revenue	(0.6)%	0.4%	

Interest expense, net was \$1.7 million for fiscal 2019, compared to interest income, net of \$0.8 million for fiscal 2018, an increase of \$2.5 million, due to an increase in interest expense associated with increased borrowings under the Credit Agreement and a decrease in interest income due to lower investment security balances in fiscal 2019.

Provision for (Benefit from) Income Taxes

	Year Ended December 31,		2019 to 2018 % Change
	2019	2018	
	(dollars in thousands)		
Provision for (benefit from) income taxes	\$ (31,459)	\$ 420	*
Percentage of revenue	(12.3)%	0.2%	

* Not meaningful

The benefit from income taxes was \$31.5 million for fiscal 2019, compared to a provision for income taxes of \$0.4 million for fiscal 2018. The change in the provision for income taxes was primarily due to the release of the valuation allowance during the second quarter of 2019 as further described in Note 13, *Income Taxes* of our Consolidated Financial Statements.

Quarterly Results of Operations

The following table presents selected unaudited quarterly consolidated statements of operations data for each of the eight quarters during the years ended December 31, 2019 and December 31, 2018. We have prepared the unaudited quarterly consolidated statements of operations data on a basis consistent with the audited annual Consolidated Financial Statements included elsewhere in this Annual Report. In management's opinion, the financial information in this table reflects all normal and recurring adjustments necessary for the fair statement of this data. This information should be read in conjunction with the Consolidated Financial Statements and related notes included elsewhere in this Annual Report. The results of historical periods are not necessarily indicative of the results for any future periods.

	Quarter Ended							
	December 31,	September 30,	June 30,	March 31,	December 31,	September 30,	June 30,	March 31,
	2019				2018			
(in thousands, except per share data)								
Consolidated Statements of Operations Data:								
Revenue	\$ 67,362	\$ 67,935	\$ 63,624	\$ 57,091	\$ 50,365	\$ 50,126	\$ 47,240	\$ 42,340
Costs and operating expenses:								
Cost of revenue (exclusive of depreciation and amortization) (1)	26,403	25,930	25,128	24,181	19,925	19,282	17,729	16,613
Sales and marketing (1)	14,441	12,636	13,232	11,219	9,577	8,681	7,625	7,405
Research and product development (1)	11,086	10,602	9,339	8,481	6,588	6,440	5,750	5,333
General and administrative (1)	9,117	8,955	8,214	8,192	7,786	6,541	5,248	5,316
Depreciation and amortization	6,226	5,678	5,415	5,076	3,792	3,705	3,579	3,500
Total costs and operating expenses	67,273	63,801	61,328	57,149	47,668	44,649	39,931	38,167
Income (loss) from operations	89	4,134	2,296	(58)	2,697	5,477	7,309	4,173
Other income (expense), net	84	(11)	(56)	(1)	(36)	1	(18)	(3)
Interest income (expense), net	(330)	(400)	(427)	(497)	156	229	226	176
Income (loss) before provision for (benefit from) income taxes	(157)	3,723	1,813	(556)	2,817	5,707	7,517	4,346
Provision for (benefit from) income taxes	(4,585)	(1,255)	(21,338)	(4,281)	168	183	43	26
Net income	\$ 4,428	\$ 4,978	\$ 23,151	\$ 3,725	\$ 2,649	\$ 5,524	\$ 7,474	\$ 4,320
Net income per common share:								
Basic	\$ 0.13	\$ 0.15	\$ 0.68	\$ 0.11	\$ 0.08	\$ 0.16	\$ 0.22	\$ 0.13
Diluted	\$ 0.12	\$ 0.14	\$ 0.65	\$ 0.11	\$ 0.07	\$ 0.16	\$ 0.21	\$ 0.12

⁽¹⁾ The following table presents stock-based compensation expense included in each respective expense category:

	Quarter Ended							
	December 31,	September 30,	June 30,	March 31,	December 31,	September 30,	June 30,	March 31,
	2019				2018			
(in thousands)								
Stock-based compensation expense included in costs and operating expenses:								
Cost of revenue (exclusive of depreciation and amortization)	\$ 393	\$ 334	\$ 415	\$ 324	\$ 351	\$ 282	\$ 250	\$ 220
Sales and marketing	367	354	302	248	326	270	228	210
Research and product development	387	353	363	308	349	218	287	225
General and administrative	731	1,151	607	672	892	994	572	663
Total stock-based compensation expense	\$ 1,878	\$ 2,192	\$ 1,687	\$ 1,552	\$ 1,918	\$ 1,764	\$ 1,337	\$ 1,318

The following table presents selected consolidated statements of operations data for the specified periods as a percentage of our revenue for those periods:

	Quarter Ended							
	December 31,	September 30,	June 30,	March 31,	December 31,	September 30,	June 30,	March 31,
	2019				2018			
Consolidated Statements of Operations Data:								
Revenue	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Costs and operating expenses:								
Cost of revenue (exclusive of depreciation and amortization)	39.2	38.2	39.5	42.4	39.6	38.5	37.5	39.2
Sales and marketing	21.4	18.6	20.8	19.7	19.0	17.3	16.1	17.5
Research and product development	16.5	15.6	14.7	14.9	13.1	12.8	12.2	12.6
General and administrative	13.5	13.2	12.9	14.3	15.5	13.0	11.1	12.6
Depreciation and amortization	9.2	8.4	8.5	8.9	7.5	7.4	7.6	8.3
Total costs and operating expenses	99.9	93.9	96.4	100.1	94.6	89.0	84.5	90.1
Income (loss) from operations	0.1	6.1	3.6	(0.1)	5.4	10.9	15.5	9.9
Other income (expense), net	0.1	—	(0.1)	—	(0.1)	—	—	—
Interest income (expense), net	(0.5)	(0.6)	(0.7)	(0.9)	0.3	0.5	0.5	0.4
Income (loss) before provision for (benefit from) income taxes	(0.2)	5.5	2.8	(1.0)	5.6	11.4	15.9	10.3
Provision for (benefit from) income taxes	(6.8)	(1.8)	(33.5)	(7.5)	0.3	0.4	0.1	0.1
Net income	6.6 %	7.3 %	36.3 %	6.5 %	5.3 %	11.0%	15.8 %	10.2 %

Seasonality

We experience limited seasonality in our Value+ services revenue, primarily with respect to certain leasing-related services we provide to our property management customers, including our tenant screening services and new tenant applications which impact electronic payment services revenue. Our property management customers historically have processed fewer applications for new tenants during the fourth quarter. As a result of this seasonal decline in activity, we have typically experienced overall slower sequential revenue growth or a sequential decline in revenue in the fourth quarter of each of our most recent fiscal years. We expect this seasonality to continue in the foreseeable future.

Liquidity and Capital Resources

Cash and Cash Equivalents

At December 31, 2019, our principal sources of liquidity were cash and cash equivalents and investment securities, which had an aggregate balance of \$50.8 million.

Working Capital

At December 31, 2019, we had working capital of \$14.3 million, compared to working capital of \$79.8 million at December 31, 2018. The decrease in our working capital was primarily due to a decrease in cash and cash equivalents related to the acquisition of Dynasty, an increase in other current liabilities due to the \$6.0 million we retained to satisfy any adjustments including without limitation certain indemnification claims to the total purchase consideration for Dynasty, the recording of lease liabilities associated with the adoption of ASU No. 2016-02, *Leases* ("ASU 2016-02"), and increases in accrued employee expenses and accrued expenses. The decrease in our working capital was partially offset by increases in investment securities-current and accounts receivable due to an increase in revenue from Value+ services.

Revolving Facility

As of December 31, 2019, we had a \$50.0 million Revolving Facility, under the terms of the Credit Agreement, as further described in Note 9, *Long-Term Debt* of our Consolidated Financial Statements included elsewhere in this Annual Report. At both December 31, 2019 and 2018, we had no outstanding balance under our Revolving Facility.

Liquidity Requirements

We believe that our existing cash and cash equivalents, investment securities, available borrowing capacity of \$50.0 million under our Revolving Facility, and cash generated from operating activities will be sufficient to meet our working capital and capital expenditure requirements for at least twelve months.

Capital Requirements

Our future capital requirements will depend on many factors, including continued market acceptance of our software solutions, change in the number of our customers, adoption and utilization of our Value+ services by new and existing customers, the timing and extent of the introduction of new core functionality, products and Value+ services, timing and extent of our expansion into adjacent or new markets and timing and extent of our investments across our organization. In addition, we have in the past entered into, and may in the future enter into, arrangements to acquire or invest in new technologies or markets adjacent to those we serve today or entirely new verticals. Furthermore, our Board of Directors has authorized our management to repurchase up to \$100.0 million of shares of our Class A common stock in open market transactions, privately negotiated transactions or otherwise. For additional information regarding our share repurchase program, refer to Note 11, *Stockholders' Equity* of our Consolidated Financial Statements included elsewhere in this Annual Report.

Cash Flows

The following table presents our cash flows for the periods indicated (in thousands):

	Year Ended December 31,	
	2019	2018
Net cash provided by operating activities	\$ 38,887	\$ 36,268
Net cash used in investing activities	(89,874)	(4,644)
Net cash (used in) provided by financing activities	(7,272)	26,346
Net (decrease) increase in cash and cash equivalents	\$ (58,259)	\$ 57,970

Cash Provided by Operating Activities

Our primary source of operating cash inflows is cash collected from our customers in connection with their use of our core solutions and Value+ services. Our primary uses of cash from operating activities are for personnel-related expenditures and third-party costs incurred to support the delivery of our software solutions.

For the year ended December 31, 2019, cash provided by operating activities was \$38.9 million resulting from our net income of \$36.3 million, adjusted by non-cash charges of \$2.4 million and a net increase in our operating assets and liabilities of \$0.2 million. The non-cash charges primarily consist of a one-time benefit of \$31.5 million related to the release of the valuation allowance for our deferred tax assets, offset by \$22.4 million of depreciation and amortization of our property and equipment, intangible assets, and capitalized software development costs, \$7.3 million of stock-based compensation and \$4.1 million of amortization of operating lease right-of-use ("ROU") assets in accordance with ASU 2016-02. The net increase in our operating assets and liabilities was primarily attributable to an increase of \$4.5 million in accrued employee expenses related to an overall increase in personnel-related costs, a \$1.4 million decrease in other assets, a \$1.2 million increase in other liabilities and a \$1.2 million increase in deferred revenue. The increase in our operating assets and liabilities was partially offset by a \$4.0 million increase in prepaid expenses and other current assets, a \$2.7 million decrease in operating lease liabilities, and a \$2.0 million increase in accounts receivable primarily driven by the growth in sales of our Value+ services.

For the year ended December 31, 2018, cash provided by operating activities was \$36.3 million resulting from our net income of \$20.0 million, adjusted by non-cash charges of \$21.1 million and a net decrease in our operating assets and liabilities of \$4.8 million. The non-cash charges primarily consisted of \$14.6 million of depreciation and amortization of our property and equipment and capitalized software, and \$6.3 million of stock-based compensation. The net decrease in our operating assets and liabilities was primarily attributable to a \$6.4 million increase in other assets due to the capitalization of deferred costs in accordance with the applicable accounting guidance, a \$6.1 million increase in prepaid expenses and other current assets, a \$4.6 million decrease in deferred revenue due to an increase in the number of customers invoiced monthly versus annually and a \$0.9 million increase in accounts receivable primarily driven by growth in our Value+ services. The decrease in our operating assets and liabilities was partially offset by a \$6.1 million increase in other liabilities, a \$3.3 million increase in accrued expenses and an increase of \$1.2 million in accrued employee expenses related to an overall increase in personnel-related costs.

Cash Used in Investing Activities

Cash used in investing activities is generally comprised of purchases, maturities and sales of investment securities, additions to capitalized software development, cash paid for business acquisitions and capital expenditures.

For the year ended December 31, 2019, investing activities used \$89.9 million in cash primarily due to \$54.0 million used to acquire Dynasty, as well as purchases of investment securities of \$25.2 million, capitalized software development costs of \$21.0 million for the continued investment in our software development, and capital expenditures of \$8.1 million to purchase property, equipment, and intangible assets for the continued growth and expansion of our business. These uses were partially offset by sales and maturities of investment securities of \$2.8 million and \$15.7 million, respectively.

For the year ended December 31, 2018, investing activities used \$4.6 million in cash primarily as a result of \$29.5 million of investment securities purchased offset by \$32.8 million of maturities and \$20.9 million of sales of investment securities. In addition, we used \$14.4 million of cash to acquire WegoWise, incurred capitalized software development costs of \$12.3 million for the continued investment in our software development, and made capital expenditures of \$2.1 million to purchase property and equipment for the continued growth and expansion of our business.

Cash (Used in) Provided by Financing Activities

Cash (used in) provided by financing activities is generally comprised of proceeds from the exercise of stock options, net share settlements for employee tax withholdings associated with the vesting of RSUs and activities associated with the Credit Facility.

For the year ended December 31, 2019, financing activities used \$7.3 million in cash primarily as a result of net share settlements for employee tax withholdings associated with the vesting of RSUs of \$6.2 million, as well as principal payments on debt of \$3.4 million, and payments of debt issuance costs of \$0.4 million, partially offset by proceeds from issuance of debt of \$2.2 million and proceeds from stock option exercises of \$0.6 million.

For the year ended December 31, 2018, financing activities provided \$26.3 million in cash primarily as a result of \$50.0 million of proceeds from the issuance of the Term Loan, partially offset by \$21.6 million used to repurchase our common stock and \$3.1 million as a result of tax withholdings from RSU net settlements offset by proceeds from stock option exercises.

Contractual Obligations and Other Commitments

The following table presents our contractual obligations and other commitments at December 31, 2019:

	Payments Due by Period				
	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
	(in thousands)				
Debt principal and interest ⁽¹⁾	\$ 54,663	\$ 2,836	\$ 7,977	\$ 43,850	\$ —
Operating lease obligations	44,415	472	6,468	7,885	29,590
	<u>\$ 99,078</u>	<u>\$ 3,308</u>	<u>\$ 14,445</u>	<u>\$ 51,735</u>	<u>\$ 29,590</u>

⁽¹⁾ Interest payments were calculated using the applicable interest rate at December 31, 2019.

At December 31, 2019, liabilities for unrecognized tax benefits of \$4.4 million were not included in our contractual obligations in the table above because, due to their nature, there is a high degree of uncertainty regarding the timing of future cash outflows and other events that would extinguish these liabilities.

For additional information regarding our contractual obligations, commitments and indemnification arrangements, refer to Note 9, *Long-term Debt* and Note 10, *Commitments and Contingencies* of our Consolidated Financial Statements included elsewhere in this Annual Report.

Off-Balance Sheet Arrangements

At December 31, 2019, we did not have any off-balance sheet arrangements.

Critical Accounting Policies and Estimates

Our Consolidated Financial Statements and the related notes included elsewhere in this Annual Report are prepared in accordance with generally accepted accounting principles in the United States. The preparation of our Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from those estimates.

We believe that the following critical accounting policies involve a greater degree of judgment or complexity than our other accounting policies. Accordingly, these are the policies we believe are the most critical to a full understanding and evaluation of our Consolidated Financial Statements. For additional information, refer to Note 2, *Summary of Significant Accounting Policies* of our Consolidated Financial Statements included elsewhere in this Annual Report.

Revenue Recognition

We generate revenue from our customers primarily for subscriptions to access our core solutions and Value+ services for our cloud-based software solutions. Revenue is recognized upon transfer of control of promised services in an amount that reflects the consideration we expect to receive in exchange for those services. We enter into contracts that can include various combinations of services, which are generally capable of being distinct, distinct within the context of the contract, and accounted for as separate performance obligations. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities.

Contracts with Multiple Performance Obligations

Many of our contracts with customers contain multiple performance obligations. For these contracts, the performance obligations include access to and use of our core solutions, implementation services, and customer support. We account for individual performance obligations separately if they are distinct. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require judgment.

The transaction price is allocated to each performance obligation on a relative standalone selling price basis. Judgment is required to determine the standalone selling price for each distinct performance obligation. We typically have more than one

standalone selling price for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we determine the standalone selling price based on our overall pricing objectives, taking into consideration customer demographics and other factors. Fees are fixed based on rates specified in the subscription agreements, which do not provide for any refunds or adjustments.

Capitalized Software Development Costs

Software development costs consist of certain payroll and stock compensation costs incurred to develop functionality of our internal-use software solutions. We capitalize certain software development costs for new offerings as well as significant upgrades and enhancements to our existing software solutions. Capitalized software development costs are amortized using the straight-line method over an estimated useful life of three years. We do not transfer ownership of our software, or lease our software, to third parties. We believe there are two key estimates within the capitalized software balance, which are the determination of the useful life of the software and the determination of the amounts to be capitalized.

We determined that a three year life is appropriate for our internal-use software based on our best estimate of the useful life of the internally developed software after considering factors such as continuous developments in the technology, obsolescence and anticipated life of the service offering before significant upgrades. Based on our prior experience, internally generated software will generally remain in use for a minimum of three years before being significantly replaced or modified to keep up with evolving customer and company needs. While we do not anticipate any significant changes to this three year estimate, a change in this estimate could produce a material impact on our financial statements.

We determine the amount of internal software costs to be capitalized based on the amount of time spent by our software engineers on projects. Costs associated with building or significantly enhancing our software solutions and new internally built software solutions are capitalized, while costs associated with planning new developments and maintaining our software solutions are expensed as incurred. There is judgment involved in estimating the stage of development as well as estimating time allocated to a particular project. A significant change in the time spent on each project could have a material impact on the amount capitalized and related amortization expense in subsequent periods.

Business Combinations

The results of a business acquired in a business combination are included in our Consolidated Financial Statements from the date of acquisition. We allocate the purchase price, including the fair value of contingent consideration, to the identifiable assets and liabilities of the acquired business at their acquisition date fair values. The excess of the purchase price over the amount allocated to the identifiable assets and liabilities, if any, is recorded as goodwill.

Determining the fair value of assets acquired and liabilities assumed requires management to make significant judgments and estimates, including the selection of valuation methodologies, estimates of future revenue and cash flows, discount rates and selection of comparable companies. The Company engages the assistance of valuation specialists in concluding on fair value measurements in connection with determining fair values of assets acquired and liabilities assumed in a business combination.

Acquisition-related transaction costs are not included as a component of consideration transferred, but are accounted for as an operating expense in the period in which the costs are incurred.

Income Taxes

We recognize deferred tax liabilities and assets for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the Consolidated Statements of Operations in the period that includes the enactment date. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. In evaluating the need for a valuation allowance, management considers the weighting of all available positive and negative evidence, which includes, among other things, the nature, frequency and severity of current and cumulative taxable income or losses, future projections of profitability, and the duration of statutory carryforward periods.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in our Consolidated Financial Statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized. We recognize interest and penalties accrued with respect to uncertain tax positions, if any, in our provision for income taxes in the Consolidated Statements of Operations.

Leases

We determine if an arrangement is a lease at inception. Operating leases are included in prepaid expenses and other current assets, operating lease ROU assets, other current liabilities, and operating lease liabilities on our Consolidated Balance Sheets. Operating lease ROU assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at commencement date. As none of our leases provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of future payments. The operating lease ROU assets also include any lease payments made and exclude lease incentives received and initial direct costs incurred. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

Recent Accounting Pronouncements

For information regarding recent accounting pronouncements, refer to Note 2, *Summary of Significant Accounting Policies* of our Consolidated Financial Statements included elsewhere in this Annual Report.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Interest Rate Risk

Short-term Investments

At December 31, 2019, we had cash and cash equivalents of \$15.8 million consisting of bank deposits and money market funds and \$35.0 million of investment securities consisting of corporate bonds, United States government agency securities and treasury securities. The primary objective of investing in securities is to support our liquidity and capital needs. We did not purchase these investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure.

Our investment securities are exposed to market risk due to interest rate fluctuations. While fluctuations in interest rates do not impact our interest income from our investment securities as all of these securities have fixed interest rates, changes in interest rates may impact the fair value of the investment securities. Since our investment securities are held as available for sale, all changes in fair value impact our other comprehensive income unless an investment security is considered impaired in which case changes in fair value are reported in other expense. At December 31, 2019, a hypothetical 100 basis point decrease in interest rates would have resulted in an approximate increase in fair value of our investment securities of \$0.3 million and a hypothetical 100 basis point increase in interest rates would have resulted in an approximate decrease in fair value of our investment securities of \$0.3 million. This estimate is based on a sensitivity model which measured an instant change in interest rates by 1% or 100 basis points at December 31, 2019.

Credit Facility

The Company is exposed to interest rate risk from its Credit Facility. Outstanding borrowings under the Credit Facility accrue interest as described in Note 9, *Long-term Debt* of our Consolidated Financial Statements included elsewhere in this Annual Report. The Company's Credit Facility is subject to interest rate fluctuations, which could be material to the Company's cash flows and results of operations. In order to determine the impact of unfavorable changes in interest rates on the Company's cash flows and result of operations, the Company performed a sensitivity analysis. Based on this sensitivity analysis we determined that the incremental expense incurred by a 100 basis point increase in interest rates would have been \$0.5 million over the 12-month period ended December 31, 2019.

Inflation Risk

We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in inflation rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
<u>Report of Independent Registered Public Accounting Firm</u>	<u>52</u>
<u>Consolidated Balance Sheets</u>	<u>55</u>
<u>Consolidated Statements of Operations</u>	<u>55</u>
<u>Consolidated Statements of Comprehensive Income</u>	<u>56</u>
<u>Consolidated Statements of Stockholders' Equity</u>	<u>57</u>
<u>Consolidated Statements of Cash Flows</u>	<u>58</u>
<u>Notes to Consolidated Financial Statements</u>	<u>60</u>

The supplementary financial information required by this Item 8 is included in Item 7 of this Annual Report in the section entitled "Quarterly Results of Operations."

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of AppFolio, Inc.

Opinion on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of AppFolio, Inc. and its subsidiaries (the "Company") as of December 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive income, of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019 and the manner in which it accounts for revenue from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As described in Management's Report on Internal Control over Financial Reporting, management has excluded Dynasty from its assessment of internal control over financial reporting as of December 31, 2019 because it was acquired by the Company in a purchase business combination during 2019. We have also excluded Dynasty from our audit of internal control over financial reporting. Dynasty is a wholly-owned subsidiary whose total assets and total revenues excluded from management's assessment and our audit of internal control over financial reporting each represent 1% of the related consolidated financial statement amounts as of and for the year ended December 31, 2019.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Acquisition of Dynasty Marketplace, Inc. ("Dynasty") - Valuation of technology and database intangible assets

As described in Notes 2 and 3 to the consolidated financial statements, in 2019 the Company completed the acquisition of Dynasty for total purchase consideration of \$60.2 million, which resulted in \$20.8 million of intangible assets, including technology of \$5.7 million and database of \$4.7 million, being recorded. Management applied significant judgment in estimating the fair value of the technology and database intangible assets acquired, which involved the use of significant estimates and assumptions, including the selection of valuation methodologies, estimates of future revenue and cash flows, discount rates, the software decay rate and database ramp up rate.

The principal considerations for our determination that performing procedures relating to the valuation of the technology and database intangible assets from the acquisition of Dynasty is a critical audit matter are (i) there was a high degree of auditor judgment and subjectivity in applying procedures relating to the fair value measurement of the technology and database intangible assets acquired due to the significant amount of judgment by management when developing the estimate, (ii) significant audit effort was required in evaluating the significant assumptions, including the software decay rate and the database ramp up rate, and (iii) the audit effort involved the use of professionals with specialized skill and knowledge to assist in performing these procedures and evaluating the audit evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the acquisition accounting, including controls over management's valuation of the technology and database intangible assets and controls over the development of the assumptions related to the valuation of intangible assets, including the software decay rate and database ramp up rate. These procedures also included, among others, (i) reading the purchase agreement, (ii) testing management's process for estimating the fair value of the technology and database intangible assets, and (iii) evaluating the reasonableness of the significant assumptions utilized by management, including the software decay rate and database ramp up rate, using professionals with specialized skill and knowledge to assist in doing so. Testing management's process included evaluating the appropriateness of the valuation methodologies and the reasonableness of significant assumptions, including the software decay rate and the database ramp up rate. Evaluating the reasonableness of the software decay rate assumption involved considering historical time to develop the software, future expected use of software acquired including planned enhancements, consistency with external market and industry data, and whether the assumption was consistent with evidence obtained in other areas of the audit. Evaluating the reasonableness of the database ramp up rate assumption involved considering historical time to acquire data, future expected data collection from sales, consistency with competitor and industry data, and whether the assumption was consistent with evidence obtained in other areas of the audit.

Realizability of deferred tax assets

As described in Notes 2 and 13 to the consolidated financial statements, the Company has recorded deferred tax assets of \$53.1 million as of December 31, 2019. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. In evaluating the need for a valuation allowance, management considers the weighting of all available positive and negative evidence, which included, among other things, the nature, frequency and severity of current and cumulative taxable income or losses, future projections of profitability, and the duration of statutory carryforward periods. In 2019, management evaluated all available positive and negative evidence, including the Company's sustained profitability in 2018 and 2019, the impact of recent acquisitions and future projections of profitability and determined that all of its deferred tax assets were more likely than not to be realized and reversed the valuation allowance against those deferred tax assets.

The principal considerations for our determination that performing procedures relating to the realizability of deferred tax assets is a critical audit matter are there was significant judgment by management in determining the amount of deferred tax assets that were more-likely-than-not to be realized in the future, including the determination to reverse the valuation allowance on deferred tax assets. This in turn led to a high degree of auditor judgment, subjectivity, and effort in performing procedures to evaluate positive and negative evidence relating to management's determination of the amount of deferred tax assets that were more-likely-than-not to be realized in the future, including the nature, frequency and severity of current and cumulative taxable income or losses, future projections of profitability, and the duration of statutory carryforward periods. Also, the audit effort involved the use of professionals with specialized skill and knowledge to assist in evaluating the evidence obtained from these procedures.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the realizability of deferred tax assets. These procedures also included, among others, evaluating positive and negative evidence used in determining the amount of deferred tax assets that were more-likely-than-not to be realized in the future, including evaluating the nature, frequency and severity of current and cumulative taxable income or losses, future projections of profitability, and the duration of statutory carryforward periods. Evaluating management's future projections of profitability involved evaluating whether the projections were reasonable considering (i) historical profitability of the Company, (ii) consistency with industry data and economic trends, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skills and knowledge were used to assist in the evaluation of the nature, frequency and severity of current and cumulative taxable income or losses and in the duration of statutory carryforward periods.

/s/ PricewaterhouseCoopers LLP
Los Angeles, California
March 2, 2020
We have served as the Company's auditor since 2012.

APPFOLIO, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except par values)

	December 31,	
	2019	2018
Assets		
Current assets		
Cash and cash equivalents	\$ 15,813	\$ 74,076
Investment securities—current	22,876	16,631
Accounts receivable, net	7,562	5,516
Prepaid expenses and other current assets	15,540	11,775
Total current assets	61,791	107,998
Investment securities—noncurrent	12,089	11,256
Property and equipment, net	14,744	6,871
Operating lease right-of-use assets	27,803	—
Capitalized software, net	30,023	20,485
Goodwill	58,425	15,548
Intangible assets, net	21,377	5,895
Deferred taxes	27,574	—
Other long-term assets	6,276	7,688
Total assets	\$ 260,102	\$ 175,741
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 1,927	\$ 1,481
Accrued employee expenses	17,758	12,377
Accrued expenses	10,833	8,281
Deferred revenue	4,586	3,414
Other current liabilities	11,139	1,447
Long-term debt, net—current portion	1,208	1,213
Total current liabilities	47,451	28,213
Operating lease liabilities	33,312	—
Long-term debt, net	47,375	48,602
Other long-term liabilities	14	7,080
Total liabilities	128,152	83,895
Commitments and contingencies (Note 10)		
Stockholders' equity:		
Preferred stock, \$0.0001 par value, 25,000 authorized and no shares issued and outstanding at December 31, 2019 and December 31, 2018	—	—
Class A common stock, \$0.0001 par value, 250,000 shares authorized at December 31, 2019 and December 31, 2018; issued - 16,923 and 16,160, shares at December 31, 2019 and December 31, 2018, respectively; outstanding - 16,552 and 15,789 shares at December 31, 2019 and December 31, 2018, respectively;	2	2
Class B common stock, \$0.0001 par value, 50,000 shares authorized at December 31, 2019 and December 31, 2018; 17,594 and 18,109 shares issued and outstanding at December 31, 2019 and December 31, 2018, respectively;	2	2
Additional paid-in capital	161,509	157,898
Accumulated other comprehensive income (loss)	33	(178)
Treasury stock, at cost, 371 Class A shares at December 31, 2019 and December 31, 2018	(21,562)	(21,562)
Accumulated deficit	(8,034)	(44,316)
Total stockholders' equity	131,950	91,846
Total liabilities and stockholders' equity	\$ 260,102	\$ 175,741

The accompanying notes to the Consolidated Financial Statements are an integral part of these statements.

APPFOLIO, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share amounts)

	Year Ended December 31,		
	2019	2018	2017

Revenue	\$ 256,012	\$ 190,071	\$ 143,803
Costs and operating expenses:			
Cost of revenue (exclusive of depreciation and amortization)	101,642	73,549	55,283
Sales and marketing	51,528	33,288	28,709
Research and product development	39,508	24,111	16,578
General and administrative	34,478	24,891	21,199
Depreciation and amortization	22,395	14,576	12,699
Total costs and operating expenses	249,551	170,415	134,468
Income from operations	6,461	19,656	9,335
Other income (expense), net	16	(56)	(96)
Interest income (expense), net	(1,654)	787	535
Income before provision for (benefit from) income taxes	4,823	20,387	9,774
Provision for (benefit from) income taxes	(31,459)	420	58
Net income	\$ 36,282	\$ 19,967	\$ 9,716
Net income per common share:			
Basic	\$ 1.07	\$ 0.59	\$ 0.29
Diluted	\$ 1.02	\$ 0.56	\$ 0.28
Weighted average common shares outstanding:			
Basic	34,016	34,128	33,849
Diluted	35,567	35,562	35,151

The accompanying notes to the Consolidated Financial Statements are an integral part of these statements.

APPFOLIO, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Net income	\$ 36,282	\$ 19,967	\$ 9,716
Other comprehensive income (loss):			
Changes in unrealized gains (losses) on investment securities	211	31	(158)
Comprehensive income	\$ 36,493	\$ 19,998	\$ 9,558

The accompanying notes to the Consolidated Financial Statements are an integral part of these statements.

APPFOLIO, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Accumulated									
	Common Stock		Common Stock		Additional Capital		Other Comprehensive Income (Loss)		Treasury Stock	Accumulated Deficit
	Shares	Amount	Shares	Amount	\$	146,692	\$	(51)	\$	\$ (76,963)
Balance at December 31, 2016	11,691	\$ 1	22,028	\$ 3	\$	146,692	\$	(51)	\$	\$ (76,963)
Exercise of stock options	165	—	—	—		663		—	—	—
Stock-based compensation	—	—	—	—		6,618		—	—	6,618
Vesting of restricted stock units, net of shares withheld for taxes	88	—	—	—		(1,559)		—	—	(1,559)
Vesting of early exercised shares	—	—	—	—		117		—	—	117
Conversion of Class B stock to Class A stock	2,926	—	(2,926)	—		—		—	—	—
Issuance of restricted stock awards	9	—	—	—		—		—	—	—
Other comprehensive loss	—	—	—	—		—		(158)	—	(158)
Net income	—	—	—	—		—		—	—	9,716
Balance at December 31, 2017	14,879	1	19,102	3		152,531		(209)	—	(67,247)
Exercise of stock options	170	—	—	—		1,035		—	—	1,035
Stock-based compensation	—	—	—	—		7,187		—	—	7,187
Vesting of restricted stock units, net of shares withheld for taxes	113	—	—	—		(2,890)		—	—	(2,890)
Vesting of early exercised shares	—	—	—	—		35		—	—	35
Conversion of Class B stock to Class A stock	993	1	(993)	(1)		—		—	—	—
Issuance of restricted stock awards	5	—	—	—		—		—	—	—
Other comprehensive income	—	—	—	—		—		31	—	31
Repurchase of common stock	(371)	—	—	—		—		—	(21,562)	—
Cumulative-effect adjustment resulting from adoption of ASU 2014-09	—	—	—	—		—		—	—	2,964
Net income	—	—	—	—		—		—	—	19,967
Balance at December 31, 2018	15,789	2	18,109	2		157,898		(178)	(21,562)	(44,316)
Exercise of stock options	120	—	—	—		553		—	—	553
Stock-based compensation	—	—	—	—		8,985		—	—	8,985
Vesting of restricted stock units, net of shares withheld for taxes	123	—	—	—		(5,933)		—	—	(5,933)
Vesting of early exercised shares	—	—	—	—		6		—	—	6
Conversion of Class B stock to Class A stock	515	—	(515)	—		—		—	—	—
Issuance of restricted stock awards	5	—	—	—		—		—	—	—
Other comprehensive income	—	—	—	—		—		211	—	211
Net income	—	—	—	—		—		—	—	36,282
Balance at December 31, 2019	16,552	\$ 2	17,594	\$ 2	\$	161,509	\$	33	\$ (21,562)	\$ (8,034)
										\$ 131,950

The accompanying notes to the Consolidated Financial Statements are an integral part of these statements.

APPFOLIO, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Cash from operating activities			
Net income	\$ 36,282	\$ 19,967	\$ 9,716
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	22,395	14,576	12,699
Amortization of operating lease right-of-use assets	4,130	—	—
Stock-based compensation	7,309	6,337	6,096
Deferred income taxes	(31,455)	—	—
Other	32	224	121
Changes in operating assets and liabilities:			
Accounts receivable	(2,031)	(908)	(876)
Prepaid expenses and other current assets	(4,031)	(6,073)	(1,009)
Other assets	1,376	(4,447)	(84)
Accounts payable	511	614	(100)
Accrued employee expenses	4,542	1,219	3,243
Accrued expenses	55	3,281	271
Deferred revenue	1,193	(4,589)	(558)
Operating lease liabilities	(2,662)	—	—
Other liabilities	1,241	6,067	(148)
Net cash provided by operating activities	38,887	36,268	29,371
Cash from investing activities			
Purchases of property, equipment and intangible assets	(8,084)	(2,102)	(2,214)
Additions to capitalized software	(20,998)	(12,304)	(10,455)
Purchases of investment securities	(25,198)	(29,516)	(26,648)
Sales of investment securities	2,750	20,900	15
Maturities of investment securities	15,660	32,819	16,474
Acquisition, net of cash acquired	(54,004)	(14,441)	—
Net cash used in investing activities	(89,874)	(4,644)	(22,828)
Cash from financing activities			
Proceeds from stock option exercises	553	1,035	663
Tax withholding for net share settlement	(6,155)	(3,127)	(1,796)
Purchase of treasury stock	—	(21,562)	—
Proceeds from issuance of debt	2,169	50,138	118
Principal payments on debt	(3,419)	(138)	(118)
Payment of debt issuance costs	(420)	—	—
Net cash (used in) provided by financing activities	(7,272)	26,346	(1,133)

APPFOLIO, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Net (decrease) increase in cash and cash equivalents	(58,259)	57,970	5,410
Cash, cash equivalents and restricted cash			
Beginning of period	74,506	16,536	11,126
End of period	<u>\$ 16,247</u>	<u>\$ 74,506</u>	<u>\$ 16,536</u>
Supplemental disclosure of cash flow information			
Cash paid for interest	\$ 2,169	\$ 118	\$ 182
Cash paid for income taxes	545	82	30
Noncash investing and financing activities			
Purchases of property and equipment included in accounts payable and accrued expenses	\$ 3,447	\$ 518	\$ 21
Additions of capitalized software included in accrued and accrued employee expenses	1,187	825	374
Stock-based compensation capitalized for software development	1,844	1,087	759
Purchase consideration for acquisitions included in other current liabilities	5,977	—	—
Debt issuance and other financing costs accrued, not paid	—	371	—

The following table presents a reconciliation of cash, cash equivalents and restricted cash reported within the Consolidated Balance Sheets to the total of the same such amounts shown above (in thousands):

	December 31,		
	2019	2018	2017
Cash and cash equivalents	\$ 15,813	\$ 74,076	\$ 16,109
Restricted cash included in other assets	434	430	427
Total cash, cash equivalents and restricted cash	<u>\$ 16,247</u>	<u>\$ 74,506</u>	<u>\$ 16,536</u>

The accompanying notes to the Consolidated Financial Statements are an integral part of these statements.

APPFOLIO, INC.
NOTES TO CONSOLIDATED AUDITED FINANCIAL STATEMENTS

1. Nature of Business

AppFolio, Inc.'s ("we," "us" or "our") mission is to revolutionize vertical industry businesses by providing great software and services. Today we offer industry-specific, cloud-based business software solutions, services and data analytics to the real estate market, which represents over 90% of our revenue, and, to a lesser extent, to the legal market.

Our real estate software solutions provide our property management customers with a system of record to automate essential business processes, a system of engagement to enhance business interactions between our customers and their clients and other stakeholders, and a system of intelligence designed to leverage data to predict and optimize business workflows in order to enable superior customer experiences and increase efficiency across our customers' businesses. Although specific functionality varies by product, our core solutions address common business operations and interactions of businesses in our targeted verticals. In addition to our core solutions, we offer a range of optional, but often business-critical, Value+ services. Our Value+ services are built to enhance, automate and streamline property management processes and support workflows essential to our customers' businesses. We also provide software solutions to the legal market that enable law firms to administer their practice and manage their caseloads more efficiently by centralizing case details in a single system of record and system of engagement.

The significant majority of our customers in the real estate market use our property management solutions. Our property management customers include third-party property managers and owner-operators who manage single- and multi-family residences, community associations, commercial properties, and student housing, as well as mixed real estate portfolios. Our legal customers are typically small law firms that directly and indirectly account for less than 10% of our annual revenue.

2. Summary of Significant Accounting Policies

Basis of Presentation and Significant Accounting Policies

The accompanying Consolidated Financial Statements were prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

Principles of Consolidation

The accompanying Consolidated Financial Statements include the operations of AppFolio, Inc. and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Our investment in SecureDocs, Inc. ("SecureDocs") is accounted for under the equity method of accounting as we have the ability to exert significant influence, but do not control and are not the primary beneficiary of the entity. Our investment in SecureDocs is not material and any income (loss) activity is not material individually or in the aggregate to our Consolidated Financial Statements for any period presented.

Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the dates of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from those estimates. Assets and liabilities which are subject to judgment and use of estimates include the fair value of assets and liabilities assumed in business combinations, fair value of financial instruments, capitalized software costs, period of benefit associated with deferred costs, incremental borrowing rate used to measure operating lease liabilities, the recoverability of goodwill and long-lived assets, income taxes, useful lives associated with property and equipment and intangible assets, contingencies, and valuation and assumptions underlying stock-based compensation and other equity instruments. On an ongoing basis, management evaluates its estimates based on historical data and experience, as well as various other factors that management believes to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources.

Segment Information

Our chief operating decision maker reviews financial information presented on an aggregated and consolidated basis, together with revenue information for our core solutions, Value+ and other service offerings, principally to make decisions about how to allocate resources and to measure our performance. Accordingly, management has determined that we have one reportable and operating segment.

Concentrations of Credit Risk

Financial instruments that potentially subject us to credit risk consist principally of cash, accounts receivable, investment securities and notes receivable. We maintain cash balances at financial institutions in excess of amounts insured by United States government agencies or payable by the United States government directly. We place our cash with high credit, quality financial institutions. We invest in investment securities with a minimum rating of A by Standard & Poor's or A-1 by Moody's and regularly monitor our investment security portfolio for changes in credit ratings.

Concentrations of credit risk with respect to accounts receivable and revenue are limited due to a large, diverse customer base. No individual customer represented 10% or more of accounts receivable at December 31, 2019 and 2018 or revenue for the years ended December 31, 2019, 2018 and 2017.

Fair Value Measurements

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. Accounting Standard Codification ("ASC") 820, *Fair Value Measurements and Disclosures* ("ASC 820"), describes a fair value hierarchy based on three levels of inputs, of which the first two are considered observable and the last unobservable, that may be used to measure fair value, which are the following:

Level 1 - Quoted prices in active markets for identical assets or liabilities or funds.

Level 2 - Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

Cash, Cash Equivalents and Restricted Cash

We consider all highly liquid investments, readily convertible to cash, and which have a remaining maturity date of three months or less at the date of purchase, to be cash equivalents. Cash and cash equivalents are recorded at fair value and consist primarily of bank deposits and money market funds.

Restricted cash of \$0.4 million at December 31, 2019 and 2018, is comprised of certificates of deposits relating to collateral requirements for customer automated clearing house and credit card chargebacks and minimum collateral requirements for our insurance services, which are recorded in other long-term assets.

Investment Securities

Our investment securities currently consist of corporate bonds, United States government agency securities ("Agency Securities") and treasury securities. We classify investment securities as available-for-sale at the time of purchase and reevaluate such classification at each balance sheet date. All investments are recorded at estimated fair value. Unrealized gains and losses for available-for-sale investment securities are included in accumulated other comprehensive income (loss), a component of stockholders' equity. We classify our investments as current when the period of time between the reporting date and the contractual maturity is twelve months or less and as noncurrent when the period of time between the reporting date and the contractual maturity is more than twelve months.

We evaluate our investments to assess whether those with unrealized loss positions are other than temporarily impaired. We consider impairments to be other than temporary if they are related to deterioration in credit risk or if it is likely we will sell the securities before the recovery of their cost basis. Declines in value judged to be other than temporary are determined based on the specific identification method and are reported in other income (expense), net in the Consolidated Statements of Operations.

Accounts Receivable

Accounts receivable are recorded at the invoiced amount, net of an allowance for doubtful accounts. The allowance for doubtful accounts is based on historical loss experience, the number of days that receivables are past due, and an evaluation of the potential risk of loss associated with delinquent accounts. Accounts receivable considered uncollectible are charged against the allowance for doubtful accounts when identified. We do not have any off-balance sheet credit exposure related to our customers. At December 31, 2019 and 2018, our allowance for doubtful accounts was not material.

Property and Equipment

Property and equipment is stated at cost, less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of assets. The estimated useful lives of our property and equipment are as follows:

Asset Type	Depreciation Period
Data center and computer equipment	3 years
Furniture and fixtures	7 years
Office equipment	2 to 5 years
Leasehold improvements	Shorter of remaining life of lease or asset life

Repair and maintenance costs are expensed as incurred. Renewals and improvements are capitalized. Assets disposed of or retired are removed from the cost and accumulated depreciation accounts and any resulting gain or loss is reflected in our results of operations.

Leases

We determine if an arrangement is a lease at inception. Operating leases are included in prepaid expenses and other current assets, operating lease right-of-use (“ROU”) assets, other current liabilities, and operating lease liabilities on our Consolidated Balance Sheets. Operating lease ROU assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments, over the lease term at commencement date. As none of our leases provide an implicit rate, we use our incremental borrowing rate based on the information available at commencement date in determining the present value of future payments. The operating lease ROU assets also include any lease payments made and excludes lease incentives received and initial direct costs incurred. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option.

Lease expense for minimum lease payments is recognized on a straight-line basis over the lease term. We have lease arrangements with lease and non-lease components, which are generally accounted for as a single lease component. Leases with an initial term of twelve months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term.

Capitalized Software Development Costs

Software development cost consist of certain payroll and stock compensation costs incurred to develop functionality of our internal-use software solutions. We capitalize certain software development costs for new offerings as well as significant upgrades and enhancements to our existing software solutions. Capitalized software development costs are amortized using the straight-line method over an estimated useful life of three years. We do not transfer ownership of our software, or lease our software, to third parties. We believe there are two key estimates within the capitalized software balance, which are the determination of the useful life of the software and the determination of the amounts to be capitalized.

We determined that a three year life is appropriate for our internal-use software based on our best estimate of the useful life of the internally developed software after considering factors such as continuous developments in the technology, obsolescence and anticipated life of the service offering before significant upgrades. Based on our prior experience, internally generated software will generally remain in use for a minimum of three years before being significantly replaced or modified to keep up with evolving customer and company needs. While we do not anticipate any significant changes to this three year estimate, a change in this estimate could produce a material impact on our financial statements.

We determine the amount of internal software costs to be capitalized based on the amount of time spent by our software engineers on projects. Costs associated with building or significantly enhancing our software solutions and new internally built software solutions are capitalized, while costs associated with planning new developments and maintaining our software solutions are expensed as incurred. There is judgment involved in estimating the stage of development as well as estimating time allocated to a particular project. A significant change in the time spent on each project could have a material impact on the amount capitalized and related amortization expense in subsequent periods.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price over the estimated fair value of the net tangible and identifiable intangible assets acquired in business combinations. Goodwill is tested for impairment at least annually at the reporting unit level or at other times if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount.

We have the option to assess goodwill for possible impairment by performing a qualitative analysis to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. A quantitative assessment is performed if the qualitative assessment results in a more-likely-than-not determination or if a qualitative assessment is not performed. The quantitative assessment considers whether the carrying amount of a reporting unit exceeds its fair value, in which case an impairment charge is recorded to the extent that the reporting unit's carrying value exceeds its fair value.

We have one reporting unit and we test for goodwill impairment annually during the fourth quarter of the calendar year. Based on the assessment performed November 1, 2019, we determined it was unlikely that our reporting unit fair value was less than its carrying value and no quantitative impairment test assessment was required. There were no indicators that our goodwill has become impaired since that date, and as such, there was no impairment of goodwill as of November 1, 2019 or December 31, 2019.

No impairment losses were recorded for goodwill during the years ended December 31, 2019, 2018 and 2017.

Intangible assets primarily consist of acquired database and technology, non-compete agreements, customer and partner relationships, trademarks, domain names and patents, which are recorded at cost, less accumulated amortization. We determine the appropriate useful life of our intangible assets by performing an analysis of expected cash flows of the acquired assets. Intangible assets are amortized over their estimated useful lives on a straight-line basis, which approximates the pattern in which the economic benefits of the assets are consumed.

Impairment of Long-Lived Assets

We assess the recoverability of our long-lived assets when events or changes in circumstances indicate that the carrying value of an asset may not be recoverable or that the useful lives of those assets are no longer appropriate. An impairment charge would be recognized when the carrying amount of a long-lived asset or asset group is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset or asset group is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset or asset group. There were no impairment charges related to the identified long-lived assets for the years ended December 31, 2019, 2018 and 2017.

Business Combinations

The results of a business acquired in a business combination are included in our Consolidated Financial Statements from the date of acquisition. We allocate the purchase price, including the fair value of contingent consideration, to the identifiable assets and liabilities of the acquired business at their acquisition date fair values. The excess of the purchase price over the amount allocated to the identifiable assets and liabilities, if any, is recorded as goodwill.

Determining the fair value of assets acquired and liabilities assumed requires management to make significant judgments and estimates, including the selection of valuation methodologies, estimates of future revenue and cash flows, discount rates and selection of comparable companies. The Company engages the assistance of valuation specialists in concluding on fair value measurements in connection with determining fair values of assets acquired and liabilities assumed in a business combination.

Acquisition-related transaction costs are not included as a component of consideration transferred, but are accounted for as an operating expense in the period in which the costs are incurred.

Revenue Recognition

We generate revenue from our customers primarily for subscriptions to access our core solutions and Value+ services for our cloud-based software solutions. Revenue is recognized upon transfer of control of promised services in an amount that reflects the consideration we expect to receive in exchange for those services. We enter into contracts that can include various combinations of services, which are generally capable of being distinct, distinct within the context of the contract, and accounted for as separate performance obligations. Revenue is recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities. Refer to Note 14, *Revenue and Other Information* for the disaggregated breakdown of revenue between core solutions, Value+ services and other revenue.

Core Solutions

We charge our customers on a subscription basis for our core solutions. Our subscription fees are designed to scale to the size of our customers' businesses. Subscription fees for our core solutions are charged on a per-unit per-month basis for our property management software solution and on a per-user per-month basis for our legal software solution. Our customers do not have rights to the underlying software code of our solutions, and, accordingly, we recognize subscription revenue over time on a straight-line basis over the contract term beginning on the date that our service is made available to the customer. The term of our core solutions subscription agreements typically ranges from one month to one year. We typically invoice our customers for subscription services in monthly or annual installments, in advance of the subscription period.

Value+ Services

We charge our customers on a subscription or usage basis for our Value+ services. Subscription-based fees are charged on a per-unit basis. We typically invoice our customers for subscription-based services in monthly installments, in advance of the subscription period. We recognize revenue for subscription-based services over time on a straight-line basis over the contract term beginning on the date that our service is made available to the customer. Usage-based fees are charged on a flat rate per transaction basis with no minimum usage commitments. We recognize revenue for usage-based services in the period the service is rendered. We generally invoice our customers for usage-based services on a monthly basis for services rendered in the preceding month. In addition, some subscription or usage-based Value+ services, such as fees for electronic payment services, are paid by either our customers or clients of our customers at the time the services are rendered.

We work with third-party partners to provide certain of our Value+ services. For these Value+ services, we evaluate whether we are the principal, and report revenue on a gross basis, or the agent, and report revenue on a net basis. In this assessment we consider if we obtain control of the specified services before they are transferred to the customer, as well as other indicators such as whether we are the party primarily responsible for fulfillment, and whether we have discretion in establishing price.

Other Revenue

Other revenue include fees from one-time services related to the implementation of our software solutions and other recurring or one-time fees related to our customers who are not otherwise using our core solutions. This includes legacy customers of businesses we have acquired where the customers haven't migrated to our core solutions. The fees for implementation and data migration services are billed upon signing our core subscription contract and are not recognized until the core solution is accessible and fully functional for our customer's use. Other services are billed when the services rendered are completed and delivered to the customer or billed in advance and deferred over the subscription period.

Contracts with Multiple Performance Obligations

Many of our contracts with customers contain multiple performance obligations. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require judgment. We account for individual performance obligations separately if they are distinct. The performance obligations for these contracts include access and use of our core solutions, implementation services, and customer support. Access and use of our core solutions and implementation services are considered distinct.

The transaction price is allocated to each performance obligation on a relative standalone selling price basis. Judgment is required to determine the standalone selling price for each distinct performance obligation. We typically have more than one standalone selling price for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we determine the standalone selling price based on our overall pricing objectives, taking into consideration customer demographics and other factors. Fees are fixed based on rates specified in the subscription agreements, which do not provide for any refunds or adjustments.

Deferred Revenue

We record deferred revenue when cash payments are received in advance of our performance. During the twelve months ended December 31, 2019 and 2018, we recognized \$3.4 million and \$7.1 million, respectively, that were included in the deferred revenue balances at December 31, 2018 and 2017, respectively.

Our payment terms vary by the type of our customer and the products or services offered. The time between invoicing and when payment is due is not significant. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined that our contracts do not include a significant financing component.

Practical Expedients

In determining the transaction price, we have applied the practical expedient which allows us not to adjust the consideration for the effects of the time value of money as long as the time between when we transfer the promised service to a customer and when a customer pays is one year or less.

We do not disclose the value of unsatisfied performance obligations for contracts with an original expected term of one year or less.

We recognize revenue in proportion to the amount we have the right to invoice for certain core solutions and Value+ services revenue, as that amount corresponds directly with our performance completed to date.

Deferred Costs

Deferred costs, which primarily consist of sales commissions, are considered incremental and recoverable costs of obtaining a contract with a customer. These costs are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to be three years. We typically do not pay commissions for contract renewals. We determined the period of benefit by taking into consideration our customer contract term, the useful life of our internal-use software, average customer life, and other factors. Amortization expense for the deferred costs is allocated based on the employee's department and included within sales and marketing expense in the accompanying Consolidated Statements of Operations. Prior to the adoption of Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09" or the "New Revenue Standard")

ASU 2014-09, our commissions were expensed as incurred.

Deferred costs were \$9.5 million and \$7.2 million at December 31, 2019 and 2018, respectively, of which \$4.8 million and \$3.2 million, respectively, are included in prepaid expenses and other current assets and \$4.6 million and \$4.0 million, respectively, are included in other assets in the accompanying Consolidated Balance Sheets. Amortization expense for deferred costs was \$4.2 million and \$2.0 million for the years ended December 31, 2019 and 2018, respectively. For the years ended December 31, 2019 and 2018, no impairments were identified in relation to the costs capitalized for the periods presented.

Cost of Revenue

Cost of revenue consists of fees paid to third-party service providers associated with delivering certain of our Value+ services (including legal fees and costs associated with the delivery and provision of those services, as well as loss reserves and other costs associated with our legal liability to landlord insurance services), personnel-related costs (including salaries, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on customer service and the support of our operations, platform infrastructure costs (such as data center operations and hosting-related costs), payment processing fees, and allocated shared costs. We typically allocate shared costs across our organization based on headcount within the applicable part of our organization. Cost of revenue excludes depreciation of property and equipment, and amortization of capitalized software development costs and intangible assets.

Sales and Marketing

Sales and marketing expense consists of personnel-related costs (including salaries, sales commissions, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on sales and marketing, costs associated with sales and marketing activities, and allocated shared costs. Marketing activities include advertising, online lead generation, lead nurturing, customer and industry events, and the creation of industry-related content and collateral. Sales commissions and other incremental costs to acquire customers and grow adoption and utilization of our Value+ services by our new and existing customers are deferred and then amortized on a straight-line basis over a period of benefit that we have determined to be three years. We focus our sales and marketing efforts on generating awareness of our software solutions, creating sales leads, establishing and promoting our brands, and cultivating an educated community of successful and vocal customers. Advertising expenses were \$5.8 million, \$4.5 million and \$3.6 million for each of the years ended December 31, 2019, 2018 and 2017, respectively, and are expensed as incurred.

Research and Product Development

Research and product development expense consists of personnel-related costs (including salaries, incentive-based compensation, benefits, and stock-based compensation) for our employees focused on research and product development, fees for third-party development resources, and allocated shared costs. Our research and product development efforts are focused on enhancing the ease of use and functionality of our existing software solutions by adding new core functionality, Value+ services and other improvements, as well as developing new products and services for new and existing markets. We capitalize the portion of our software development costs that meets the criteria for capitalization. Amortization of capitalized software development costs is included in depreciation and amortization expense.

General and Administrative

General and administrative expense consists of personnel-related costs (including salaries, a majority of total incentive-based compensation, benefits, and stock-based compensation) for employees in our executive, finance, information technology, human resources, corporate development, legal and administrative organizations. In addition, general and administrative expense includes fees for third-party professional services (including audit, legal, tax, and consulting services), transaction costs related to business combinations, other corporate expenses, and allocated shared costs.

Depreciation and Amortization

Depreciation and amortization expense includes depreciation of property and equipment, amortization of capitalized software development costs and amortization of intangible assets. We deprecate or amortize property and equipment, software development costs and intangible assets over their expected useful lives on a straight-line basis, which approximates the pattern in which the economic benefits of the assets are consumed.

Stock-Based Compensation

We recognize stock-based compensation expense for stock-based awards granted to employees and directors that can be settled in shares of our common stock. We estimate the fair value of stock options and performance-based stock options ("PSOs"), using the Black-Scholes option-pricing model. We estimate the fair value of RSAs, RSUs and performance-based RSUs or PSU's based on the fair value of our common stock on the date of grant.

Stock Options

For the years ended December 31, 2019 and 2018, we did not grant time-based stock options or PSOs.

For the year ended December 31, 2017, we determined the fair value of awards using the Black-Scholes option-pricing model which requires the use of subjective assumptions. Key assumptions used in this model were (1) the fair value of the underlying ordinary shares, (2) the time period for which we expect the options will be outstanding (the expected term), (3) the expected volatility of our stock price, (4) the risk-free interest rate, and (5) the expected dividend yield. Expected term and expected volatility are the judgments that we believe are subjective in estimating fair value (and related share-based compensation expense) of our option awards.

For the year ended December 31, 2017, the expected term was determined using the simplified method, which is calculated as the midpoint of the stock option vesting term and the expiration date of the stock option. We considered historical average volatilities of publicly traded industry peers, in estimating expected volatility for options. Other assumptions used include risk-free interest rate and expected dividend yield. The risk-free interest rate is based on the yield for a U.S. Treasury security having a maturity similar to the expected term of the related option grant. This assumption was dependent on the assumed expected term. The dividend yield of 0% is based on us not paying or anticipating paying any cash dividends in the foreseeable future.

Restricted Stock Units

RSUs vest in equal tranches over four annual periods and are expensed on a straight-line basis over the vesting period. The shares underlying the RSU grants are not issued and outstanding until the applicable vesting date.

Performance-Based Equity Awards

Our PSOs and PSUs, include performance conditions that require us to estimate the probable outcome of the performance condition. This assessment is based on management's judgment using internally developed forecasts and assessed at each reporting period. Compensation cost is recorded if it is probable that the performance condition will be achieved. Adjustments to compensation expense are made each period based on changes in our estimate of the number of PSOs and PSUs that are probable of vesting. PSOs and PSUs will vest upon achievement of the relevant performance metric once such calculation is reviewed and approved by our Board of Directors.

Forfeiture Rate

We estimate a forfeiture rate to calculate our stock-based compensation expense for our stock-based awards. The forfeiture rate is based on an analysis of actual forfeitures. We will continue to evaluate the appropriateness of the forfeiture rate based on actual forfeiture experience, analysis of employee turnover, and other factors. Changes in the estimated forfeiture rate can have a significant impact on our stock-based compensation expense as the cumulative effect of adjusting the rate is recognized in the period the estimated forfeiture rate is changed. If a revised forfeiture rate is higher than the previously-estimated forfeiture rate, an adjustment is made that will result in a decrease to our stock-based compensation expense recognized in our Consolidated Financial Statements. If a revised forfeiture rate is lower than the previously-estimated forfeiture rate, an adjustment is made that will result in an increase to our stock-based compensation expense recognized in our Consolidated Financial Statements.

Income Taxes

We recognize deferred tax liabilities and assets for the expected future tax consequences of temporary differences between the carrying amounts and the tax bases of assets and liabilities. Deferred income tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in the Consolidated Statements of Operations in the period that includes the enactment date. A valuation allowance is recorded when it is more likely than not that some of the deferred tax assets will not be realized. In evaluating the need for a valuation allowance, management considers the weighting of all available positive and negative evidence, which includes, among other things, the nature, frequency and severity of current and cumulative taxable income or losses, future projections of profitability, and the duration of statutory carryforward periods.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in our Consolidated Financial Statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized. We recognize interest and penalties accrued with respect to uncertain tax positions, if any, in our provision for income taxes in the Consolidated Statements of Operations.

Net Income per Share

Basic net income per share includes no dilution and is computed by dividing net income for the period by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income for the period by the weighted average number of shares of common stock and potentially dilutive common stock outstanding during the period. The dilutive effect of outstanding options and equity incentive awards is reflected in diluted net income per share by application of the treasury stock method. The calculation of diluted net income per share excludes all anti-dilutive common shares.

The net income per common share was the same for our Class A and Class B common shares because they are entitled to the same liquidation and dividend rights and are therefore combined in the table below. The following table presents a reconciliation of our weighted average number of Class A and Class B common shares used to compute net income per share (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Weighted average common shares outstanding	34,020	34,139	33,876
Less: Weighted average unvested restricted shares subject to repurchase	4	11	27
Weighted average common shares outstanding; basic	<u>34,016</u>	<u>34,128</u>	<u>33,849</u>
Weighted average common shares outstanding; basic	34,016	34,128	33,849
Plus: Weighted average options, restricted stock units and restricted shares used to compute diluted net income per common share	1,551	1,434	1,302
Weighted average common shares outstanding; diluted	<u>35,567</u>	<u>35,562</u>	<u>35,151</u>

Approximately 187,000, 358,000 and 548,000 shares of PSOs and PSUs are not included in the computations of diluted and anti-dilutive shares for the years ended December 31, 2019, 2018 and 2017, respectively, as they are considered contingently issuable upon the satisfaction of pre-defined performance measures and their respective performance measures have not been met.

The following table presents the number of anti-dilutive common shares excluded from the calculation of weighted average number of shares used to compute diluted net income per share for the years ended December 31, 2019, 2018 and 2017 (in thousands):

	December 31,		
	2019	2018	2017
Unvested restricted stock units	10	10	21
Contingent restricted stock units ⁽¹⁾	—	—	6
Total shares excluded from diluted net income per common share	10	10	27

⁽¹⁾The reported shares are based on fixed price RSU commitments for which the number of shares has not been determined at the grant date. The number of shares have been determined by dividing the fixed price commitment to issue shares in the future by the closing price of our common stock at the applicable reporting period date.

Recently Adopted Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued the New Revenue Standard, which requires an entity to recognize the amount of revenue to which it expects to be entitled for the transfer of promised goods or services to customers. The New Revenue Standard also includes Subtopic 340-40, *Other Assets and Deferred Costs - Contracts with Customers*, which discusses the deferral of incremental costs of obtaining a contract with a customer.

We adopted the New Revenue Standard at January 1, 2018 using the modified retrospective transition method applied to those contracts which were not completed at that date. We recognized the cumulative effect of initially applying the New Revenue Standard as an adjustment to the opening balance of retained earnings.

The adoption of the New Revenue Standard did not have an impact on our revenues. It did, however, have a significant impact related to the deferral of incremental costs of obtaining contracts. Prior to the adoption of the New Revenue Standard, our commissions were expensed as incurred.

The cumulative effects of the changes made to our Consolidated Balance Sheet at January 1, 2018 for the adoption of the New Revenue Standard were as follows (in thousands):

	Balance at December 31, 2017	Adjustments	Balance at January 1, 2018
Assets			
Prepaid expenses and other current assets	\$ 4,546	\$ 1,148	\$ 5,694
Other assets	1,238	1,816	3,054
Equity			
Accumulated deficit	\$ (67,247)	\$ 2,964	\$ (64,283)

In February 2016, the FASB issued ASU No. 2016-02, *Leases* ("ASU 2016-02"), which requires an entity to recognize ROU assets and lease liabilities on its balance sheet and disclose key information about leasing arrangements. ASU 2016-02 offers specific accounting guidance for a lessee, a lessor and sale and leaseback transactions. Lessees and lessors are required to disclose qualitative and quantitative information about leasing arrangements to enable a user of the financial statements to assess the amount, timing and uncertainty of cash flows arising from leases. In July 2018, the FASB issued ASU No. 2018-11, *Leases* (Topic 842): Targeted Improvements ("ASU 2018-11"). Among other things, ASU 2018-11 provides administrative relief by allowing entities to implement the lease standard on a modified retrospective basis (the "Optional Transition Method"). Effectively, the Optional Transition Method permits us to adopt the lease standard through a cumulative effect adjustment to our opening balance sheet as of January 1, 2019, and report under the new lease standard on a post-adoption basis.

We adopted ASU 2016-02 effective January 1, 2019, using the Optional Transition Method. We elected the package of practical expedients permitted under the transition guidance, which allows us to carry forward our historical lease classification, our assessment of whether a contract is or contains a lease, and our initial direct costs for any leases that existed prior to adoption of the new lease standard. The comparative information has not been recast and continues to be reported under the accounting standards in effect for those periods. We updated our accounting policies, processes, internal controls and information systems that were required to meet the new lease standard's reporting and disclosure requirements.

The adoption of ASU 2016-02 had a material impact on our Consolidated Balance Sheets, but did not have an impact on our Consolidated Statements of Operations or our Consolidated Statements of Cash Flows. The most significant impact was the recognition of ROU assets and lease liabilities for operating leases. We also reclassified prepaid and deferred rent to the ROU asset balance as of January 1, 2019.

The cumulative effect of the changes made to our Consolidated Balance Sheet at January 1, 2019 for the adoption of the new lease standard was as follows (in thousands):

	Balance at December 31, 2018		Adjustments		Balance at January 1, 2019
Assets					
Prepaid expenses and other current assets	\$ 11,775		\$ (317)		\$ 11,458
Operating lease right-of-use assets	—		16,945		16,945
Liabilities and Stockholders' Equity					
Other current liabilities	\$ 1,447		\$ 3,493		\$ 4,940
Operating lease liabilities	—		20,056		20,056
Other long-term liabilities	7,080		(6,921)		159

In March 2017, the FASB issued ASU No. 2017-08, Receivables-Nonrefundable Fees and Other Costs (Subtopic 310-20), Premium Amortization on Purchased Callable Debt Securities ("ASU 2017-08"). ASU 2017-08 shortens the amortization period for certain callable debt securities held at a premium. Specifically, ASU 2017-08 requires the premium to be amortized to the earliest call date. ASU 2017-08 does not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity. The amendments should be applied on a modified retrospective basis, with a cumulative-effect adjustment made directly to retained earnings at the beginning of the period of adoption. The adoption of this guidance did not have a material impact on our financial condition, results of operations, cash flows or disclosures.

In June 2018, the FASB issued ASU No. 2018-07, Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07"). This amendment expands the scope of Topic 718, Compensation—Stock Compensation (which only included share-based payments to employees) to include share-based payments issued to nonemployees for goods or services. Consequently, the accounting for share-based payments to nonemployees and employees will be substantially aligned. The adoption of this guidance did not have a material impact on our financial condition, results of operations, cash flows or disclosures.

Recent Accounting Pronouncements Not Yet Adopted

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"), which amends the current accounting guidance and requires the measurement of all expected losses based on historical experience, current conditions and reasonable and supportable forecasts. This guidance amends the accounting for credit losses for available-for-sale investment securities and purchased financial assets with credit deterioration. ASU 2016-13 is effective for annual periods beginning after December 15, 2019, and interim periods within those annual periods. We do not expect the adoption of ASU 2016-13 will have a material impact on our financial condition, results of operations, cash flows or disclosures.

In August 2018, the FASB issued ASU No. 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 ("ASU 2018-15"), a series of amendments which align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected by these amendments. For public business entities, the amendments are effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. We adopted ASU 2018-15 on January 1, 2020, on a prospective basis for all implementation costs incurred after the date of adoption. We do not expect the adoption of this guidance will have a material impact on our financial condition, results of operations, cash flows or disclosures.

In December 2019, the FASB issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). This amendment was issued to simplify the accounting for income taxes by removing certain exceptions for recognizing deferred taxes, performing intraperiod allocation, and calculating income taxes in interim periods. Further, ASU 2019-12 adds guidance to reduce complexity in certain areas, including recognizing deferred taxes for tax basis goodwill and allocating taxes to members of a consolidated group. ASU 2019-12 is effective for public business entities for fiscal years, and interim periods within those years, beginning after December 15, 2020. We do not expect the adoption of ASU 2019-12 will have a material impact on our financial condition, results of operations, cash flows or disclosures.

3. Business Combinations

Acquisition of Dynasty

On January 7, 2019, we acquired 100% of the voting equity interest of Dynasty, a provider of advanced AI solutions for the real estate market. Dynasty offers advanced conversational AI solutions that automate leasing communications, replace manual tasks and help customers grow their portfolios. Dynasty's technology is designed to enable operational efficiency in the leasing process including consistent prospect experience, lead conversion, and improved market insights.

The total purchase consideration was \$60.2 million, of which \$6.0 million (the "Holdback Amount") was retained by the Company to satisfy any such adjustments, including without limitation certain indemnification claims. The balance of the Holdback Amount, less any amount retained with respect to any unresolved indemnification claims, was released to the stockholders of Dynasty on January 10, 2020 in accordance with the terms of the purchase agreement. The Holdback Amount is recorded in *other current liabilities* on the Consolidated Balance Sheet as of December 31, 2019.

The transaction was accounted for using the acquisition method, and as a result, assets acquired and liabilities assumed were recorded at their estimated fair values as of the acquisition date. Determining the fair value of assets acquired and liabilities assumed requires management to make significant judgments and estimates, including the selection of valuation methodologies and comparable companies, estimates of future revenue and cash flows, discount rates, and the software decay rate and database ramp up rate. The following table summarizes the final purchase price allocation (in thousands) as well as the estimated useful lives of the acquired intangible assets over which they are amortized on a straight-line basis, as this approximates the pattern in which economic benefits are consumed:

	Amount (in thousands)	Estimated Useful Life (in years)
Total current assets	\$ 305	
Identified intangible assets:		
Technology	5,730	4.0
Database	4,710	10.0
Customer relationships	1,110	5.0
Backlog	470	1.0
Trademark & trade name	1,390	10.0
Non-compete agreement	7,340	5.0
Total intangible assets subject to amortization	20,750	6.0
Goodwill	42,877	Indefinite
Other noncurrent assets	35	
Total assets acquired	<u>63,967</u>	
Accrued and other liabilities	48	
Deferred tax liability, net	3,711	
Total liabilities assumed	<u>3,759</u>	
Purchase consideration	<u>\$ 60,208</u>	

Goodwill is mainly attributable to synergies expected from the acquisition and assembled workforce and is non-deductible for U.S. federal income tax purposes.

We incurred a total of \$291,000 in transaction costs related to the acquisition and expensed all transaction costs incurred during the period in which such service was received. The results of operations of Dynasty since the acquisition are included in our Consolidated Statements of Operations for the Year Ended December 31, 2019. Revenue and net loss attributable to Dynasty in the period from the acquisition date of January 7, 2019 through December 31, 2019, was \$2.8 million and \$9.2 million, respectively.

Acquisition of WegoWise

On August 31, 2018, we completed the acquisition of substantially all of the assets of WegoWise, Inc. ("WegoWise"), a provider of cloud-based utility analytics software solutions serving the real estate market. The WegoWise platform empowers building owners and third-party property managers to better manage operating and capital expenditures relating to utilities. Earlier this year we launched our AppFolio Utility Management Value+ service, which has been developed from certain key aspects of the WegoWise platform, and is a fully integrated offering that provides enhanced functionality to our real estate customers for utility analytics and management.

The consideration paid in cash for the assets was \$14.4 million. The transaction was accounted for using the acquisition method, and as a result, assets acquired and liabilities assumed were recorded at their estimated fair values as of the acquisition date. The following table summarizes the final purchase price allocation (in thousands) as well as the estimated useful lives of the acquired intangible assets over which they are amortized on a straight-line basis, as this approximates the pattern in which economic benefits are consumed:

	Amount (in thousands)	Estimated Useful Life (in years)
Net tangible assets	\$ 270	
Identified intangible assets:		
Customer relationships	1,170	5.0
Database	3,620	10.0
Trademark and trade name	370	10.0
Non-compete agreement	60	5.0
Backlog	140	1.0
Total intangible assets subject to amortization	<u>5,360</u>	<u>8.6</u>
Goodwill	8,811	Indefinite
Purchase consideration, paid in cash	<u><u>\$ 14,441</u></u>	

Goodwill is mainly attributable to synergies expected from the acquisition and assembled workforce and is deductible for U.S. federal income tax purposes.

We incurred a total of \$240,000 in transaction costs related to the acquisition and expensed all transaction costs incurred during the period in which such service was received. The results of operations of WegoWise since the acquisition are included in our Consolidated Statements of Operations for the year ended December 31, 2018. Revenue and net loss attributable to WegoWise, in the period from the acquisition date of August 31, 2018 through December 31, 2018, were \$0.4 million and \$1.4 million, respectively.

Pro Forma Results of Operations

The following unaudited pro forma information has been prepared for illustrative purposes only, and assumes that the aforementioned Dynasty and WegoWise acquisitions occurred on January 1, 2018 and January 1, 2017, respectively, and includes pro forma adjustments related to the amortization of acquired intangible assets, elimination of historical interest and amortization expense, income taxes, compensation arrangements, and the transaction costs incurred. The unaudited pro forma results have been prepared based on estimates and assumptions, which we believe are reasonable; however, they are not necessarily indicative of the consolidated results of operations had the acquisitions occurred at the beginning of the periods presented, or of future results of operations. The unaudited pro forma results are as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Revenue	\$ 256,047	\$ 193,405	\$ 146,859
Net income	32,339	5,937	5,052

4. Investment Securities and Fair Value Measurements

Investment Securities

Investment securities classified as available-for-sale consisted of the following at December 31, 2019 and 2018 (in thousands):

	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate bonds	\$ 9,597	\$ 18	\$ (1)	\$ 9,614
Agency securities	11,101	17	—	11,118
Treasury securities	14,222	12	(1)	14,233
Total available-for-sale investment securities	<u>\$ 34,920</u>	<u>\$ 47</u>	<u>\$ (2)</u>	<u>\$ 34,965</u>

	December 31, 2018			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Corporate bonds	\$ 23,720	\$ —	\$ (163)	\$ 23,557
Agency securities	4,345	4	(19)	4,330
Total available-for-sale investment securities	<u>\$ 28,065</u>	<u>\$ 4</u>	<u>\$ (182)</u>	<u>\$ 27,887</u>

At December 31, 2019, the unrealized losses on investment securities which have been in a net loss position for twelve months or greater were not material. These unrealized losses are considered temporary and there were no impairments considered to be "other-than-temporary" based on our evaluation of available evidence, which includes our intent to hold these investments to maturity or a recovery of the cost basis.

At December 31, 2019 and 2018, the contractual maturities of our investments did not exceed 36 months. The fair values of available-for-sale investments, by remaining contractual maturity, are as follows (in thousands):

	December 31, 2019		December 31, 2018	
	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due in one year or less	\$ 22,846	\$ 22,876	\$ 16,738	\$ 16,631
Due after one year through three years	12,074	12,089	11,327	11,256
Total available-for-sale investment securities	<u>\$ 34,920</u>	<u>\$ 34,965</u>	<u>\$ 28,065</u>	<u>\$ 27,887</u>

During the years ended December 31, 2019 and 2018, we had sales and maturities (which include calls) of investment securities, as follows (in thousands):

	Year Ended December 31, 2019			
	Gross Realized Gains	Gross Realized Losses	Gross Proceeds from Sales	Gross Proceeds from Maturities
Corporate bonds	\$ —	\$ (1)	\$ 2,750	\$ 11,350
Agency securities	6	—	—	3,625
Treasury securities	—	—	—	685
	\$ 6	\$ (1)	\$ 2,750	\$ 15,660

	Year Ended December 31, 2018			
	Gross Realized Gains	Gross Realized Losses	Gross Proceeds from Sales	Gross Proceeds from Maturities
Corporate bonds	\$ —	\$ (11)	\$ 6,624	\$ 19,307
Agency securities	4	(14)	5,671	7,000
Certificates of deposit	—	—	—	2,982
Treasury securities	—	(10)	8,605	3,530
	\$ 4	\$ (35)	\$ 20,900	\$ 32,819

For the years ended December 31, 2019, 2018 and 2017 we received interest income net of the amortization and accretion of the premium and discount of \$0.6 million, \$1.0 million, and \$0.7 million, respectively.

Fair Value Measurements

Recurring Fair Value Measurements

Financial assets and financial liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The following tables presents our financial assets and liabilities measured at fair value on a recurring basis at December 31, 2019 and 2018, by level within the fair value hierarchy (in thousands):

	December 31, 2019			Total Fair Value
	Level 1	Level 2	Level 3	
Cash equivalents:				
Money market funds	\$ 337	\$ —	\$ —	\$ 337
Available-for-sale investment securities:				
Corporate bonds	—	9,614	—	9,614
Agency securities	—	11,118	—	11,118
Treasury securities	14,233	—	—	14,233
Total	\$ 14,570	\$ 20,732	\$ —	\$ 35,302

	December 31, 2018			Total Fair Value
	Level 1	Level 2	Level 3	
Cash equivalents:				
Money market funds	\$ 10,694	\$ —	\$ —	\$ 10,694
Available-for-sale investment securities:				
Corporate bonds	—	23,557	—	23,557
Agency securities	—	4,330	—	4,330
Total	\$ 10,694	\$ 27,887	\$ —	\$ 38,581

The carrying amounts of cash equivalents, restricted cash, accounts receivable, accounts payable and accrued liabilities approximate fair value because of the short maturity of these items.

The estimated fair value of the term loan made available to us by Wells Fargo Bank, National Association ("Wells Fargo"), as administrative agent, and the lenders that are parties thereto ("Term Loan"), approximates its carrying value due to the variable interest rates. We consider the fair value of the Term Loan to be a Level 2 measurement as the Term Loan is not actively traded. We carry the Term Loan at face value less the unamortized discount on our Consolidated Balance Sheets. Refer to Note 9, *Long-Term Debt* of our Consolidated Financial Statements for more information about the Term Loan.

There were no changes to our valuation techniques used to measure asset and liability fair values on a recurring basis during the year ended December 31, 2019. The valuation techniques for the items in the table above are as follows:

Cash Equivalents

At December 31, 2019 and 2018, cash equivalents include cash invested in money market funds with a maturity of three months or less. Fair value is based on market prices for identical assets.

Available-for-Sale Investment Securities

Our Level 2 securities were priced by a pricing vendor. The pricing vendor utilizes the most recent observable market information in pricing these securities or, if specific prices are not available for these securities, other observable inputs like market transactions involving comparable securities are used.

Non-Recurring Fair Value Measurements

Certain assets, including goodwill, intangible assets and our note receivable with SecureDocs, are also subject to measurement at fair value on a non-recurring basis using Level 3 measurement, but only when they are deemed to be impaired as

a result of an impairment review. For the years ended December 31, 2019, 2018 and 2017, no impairments were identified on those assets required to be measured at fair value on a non-recurring basis.

5. Property and Equipment

Property and equipment consists of the following at December 31, 2019 and 2018 (in thousands):

	December 31,	
	2019	2018
Data center and computer equipment	\$ 7,983	\$ 6,854
Furniture and fixtures	3,953	2,928
Office equipment	1,141	798
Leasehold improvements	6,192	5,254
Construction in process	7,118	79
Gross property and equipment	26,387	15,913
Less: Accumulated depreciation	(11,643)	(9,042)
Total property and equipment, net	\$ 14,744	\$ 6,871

Depreciation expense for property and equipment totaled \$3.1 million, \$2.4 million, and \$2.3 million for the years ended December 31, 2019, 2018 and 2017, respectively.

6. Internal-Use Software Development Costs

Internal-use software development costs were as follows (in thousands):

	December 31,	
	2019	2018
Internal use software development costs, gross	\$ 81,475	\$ 58,237
Less: Accumulated amortization	(51,452)	(37,752)
Internal use software development costs, net	\$ 30,023	\$ 20,485

Capitalized software development costs were \$23.6 million, \$13.8 million and \$11.1 million for the years ended December 31, 2019, 2018 and 2017, respectively. Amortization expense with respect to software development costs totaled \$14.0 million, \$11.0 million and \$9.0 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Future amortization expense with respect to capitalized software development costs at December 31, 2019 is estimated as follows (in thousands):

Years Ending December 31,	
2020	\$ 14,578
2021	10,738
2022	4,691
2023	16
Total amortization expense	\$ 30,023

7. Goodwill and Intangible Assets

Intangible assets consisted of the following at December 31, 2019 and 2018 (in thousands, except years):

	December 31, 2019				
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Weighted Average Useful Life in Years	
Customer relationships	\$ 3,070	\$ (1,296)	\$ 1,774	5.0	
Database	8,330	(954)	7,376	10.0	
Technology	10,541	(6,074)	4,467	5.0	
Trademarks and trade names	2,690	(898)	1,792	6.0	
Partner relationships	680	(680)	—	3.0	
Non-compete agreements	7,400	(1,484)	5,916	5.0	
Domain names	301	(276)	25	5.0	
Patents	252	(225)	27	5.0	
Backlog	470	(470)	—	1.0	
	<u>\$ 33,734</u>	<u>\$ (12,357)</u>	<u>\$ 21,377</u>		6.2

	December 31, 2018				
	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Weighted Average Useful Life in Years	
Customer relationships	\$ 1,960	\$ (728)	\$ 1,232	5.0	
Database	3,620	(121)	3,499	10.0	
Technology	4,811	(4,506)	305	8.0	
Trademarks and trade names	1,300	(642)	658	9.0	
Partner relationships	680	(680)	—	3.0	
Non-compete agreements	100	(44)	56	4.0	
Domain names	273	(273)	—	5.0	
Patents	285	(233)	52	5.0	
Backlog	140	(47)	93	1.0	
	<u>\$ 13,169</u>	<u>\$ (7,274)</u>	<u>\$ 5,895</u>		7.0

Amortization expense with respect to intangible assets totaled \$5.3 million, \$1.2 million and \$1.4 million for the years ended December 31, 2019, 2018 and 2017, respectively. Future amortization expense with respect to intangible assets is estimated as follows (in thousands):

Years Ending December 31,	
2020	\$ 4,642
2021	4,507
2022	4,445
2023	2,869
2024	1,373
Thereafter	3,541
Total amortization expense	<u>\$ 21,377</u>

Our goodwill balance is solely attributed to acquisitions. There have been no impairment charges recorded against goodwill. Goodwill recorded during the twelve months ended December 31, 2019, which related to the acquisition of Dynasty was attributed to our one reporting unit. The change in the carrying amount of goodwill is as follows (in thousands):

Goodwill at December 31, 2018	\$ 15,548
Goodwill from acquisition of Dynasty	42,877
Goodwill at December 31, 2019	<u>\$ 58,425</u>

8. Leases

We have operating leases for our corporate offices and data centers. Our leases have remaining lease terms ranging from one to twelve years, some of which include options to extend the leases for up to 10 years. These options to extend have not been recognized as part of our operating lease ROU assets and lease liabilities as it is not reasonably certain that we will exercise these options. Our lease agreements do not contain any residual value guarantees or material restrictive covenants. We have lease agreements with lease and non-lease components, which we have elected to combine for all asset classes. The total lease cost associated with our operating leases for the twelve months ended December 31, 2019 was \$5.1 million.

Lease-related assets and liabilities were as follows at December 31, 2019 (in thousands):

Assets	
Prepaid expenses and other current assets	\$ 3,908
Operating lease right-of-use assets	27,803
Liabilities	
Other current liabilities	\$ 2,826
Operating lease liabilities	33,312
Total lease liabilities	<u>\$ 36,138</u>
Weighted-average remaining lease term (years)	10.6
Weighted-average discount rate	4.7%

Supplemental cash flow information related to leases was as follows for the twelve months ended December 31, 2019 (in thousands):

Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 5,007
Right-of-use assets obtained in exchange for lease obligations:	
Operating leases	\$ 14,986

Future minimum lease payments under non-cancellable leases as of December 31, 2019 were as follows (in thousands):

Years ending December 31,	
2020 ⁽¹⁾	\$ 472
2021 ⁽¹⁾	2,383
2022	4,085
2023	3,977
2024	3,908
Thereafter	29,590
Total future minimum lease payments	44,415
Less: imputed interest	(12,185)
Total ⁽²⁾	<u>\$ 32,230</u>

⁽¹⁾ Future minimum lease payments for the years ending December 31, 2020 and 2021 are presented net of tenant improvement allowances of \$5.5 million and \$2.3 million, respectively.

⁽²⁾Total future minimum lease payments include the current portion of lease liabilities recorded in prepaid expenses and other current assets of \$3.9 million which relates to certain of the Company's leases for which the lease incentives to be received exceed the minimum lease payments to be paid over the next twelve months.

A summary of our future minimum payments for obligations under non-cancellable operating leases as of December 31, 2018 was as follows (in thousands):

Years Ending December 31,	
2019	\$ 4,211
2020	4,889
2021	4,038
2022	2,717
2023	2,053
Thereafter	9,128
Total lease commitments	<u>\$ 27,036</u>

We recorded rent expense of \$2.6 million and \$2.1 million for the years ended December 31, 2018 and 2017, respectively.

On April 1, 2019, we signed a new lease with Rose Studios, LLC to lease approximately 5,000 square feet of office space located in Venice, California. The lease is for a five-year term commencing August 1, 2019 ending on July 31, 2024. The total commitment under this lease is \$2.0 million for which the remaining amount due at December 31, 2019 is included in the maturities table above.

On December 6, 2019, we signed three new leases for certain premises located in the Castilian Technical Center at 50, 70, and 90 Castilian Drive in Santa Barbara, California. The leases replaced the Company's prior lease agreements with the previous landlord with respect to the premises. The leases commenced December 6, 2019 and are for a twelve-year term ending on February 29, 2032, with two consecutive five-year renewal periods, each at the Company's option. The total commitment under these lease agreements is \$36.5 million for which the remaining amount due at December 31, 2019 is included in the maturities table above.

9. Long-term Debt

The following is a summary of our long-term debt at December 31, 2019 (in thousands):

Principal amounts due under term loan	\$	48,750
Less: Debt financing costs		(167)
Long-term debt, net of unamortized debt financing costs		48,583
Less: Current portion of long-term debt		(1,208)
Total long-term debt, net of current portion	\$	47,375

Scheduled principal payments for the Term Loan at December 31, 2019 are as follows (in thousands):

Years Ending December 31,		
2020	\$	1,250
2021		2,500
2022		2,500
2023		42,500
Total principal payments	\$	48,750

Credit Agreement

On December 24, 2018, we amended our credit agreement (Amendment Number Two to the Credit Agreement, or the "Second Amendment") with Wells Fargo, as administrative agent, and the lenders that are parties thereto (as amended, the "Credit Agreement"). Under the terms of the Second Amendment, the lenders have made available to us a \$50.0 million term loan (the "Term Loan") and have increased the existing \$25.0 million Revolving Facility to \$50.0 million. The maturity date of the Term Loan and Revolving Facility is December 24, 2023. In addition, we are now permitted to make certain restricted junior payments, including without limitation stock repurchases and enter into acquisitions in which we are the purchaser ("Acquisitions"), with no dollar cap on such Acquisitions, so long as we maintain certain specified liquidity requirements and leverage ratios.

The Second Amendment also modifies certain financial covenants by, among other things, requiring us to maintain (i) an EBITDA to interest expense ratio of not less than 3.0 to 1.0, and (ii) a funded indebtedness to EBITDA ratio of not more than 3.5:1.0 (the "Required Leverage Ratio") (decreasing by 0.25 per year until the Required Leverage Ratio is 2.5 to 1.0); provided, however, that we are not required to maintain the foregoing ratios if our liquidity (sum of remaining borrowing capacity and available cash) has equaled or exceeded the greater of \$20.0 million and 20% of the sum of the outstanding principal amount of the Term Loan and commitments under the Revolving Facility. If we enter into an Acquisition with a purchase price greater than or equal to \$20.0 million, then the Required Leverage Ratio will be increased by 0.5 for the 12-month period immediately following the consummation of such Acquisition.

The Credit Agreement contains customary affirmative, negative and financial covenants. The affirmative covenants require us to, among other things, disclose financial and other information to the lenders, maintain our business and properties, and maintain adequate insurance. The negative covenants restrict us from, among other things, incurring additional indebtedness, prepaying certain types of indebtedness, encumbering or disposing of our assets, making fundamental changes to our corporate structure, and making certain dividends and distributions. At December 31, 2019, we were in compliance with the financial covenants under the Credit Agreement.

Under the terms of the Second Amendment, borrowings under the Credit Agreement will bear interest at a fluctuating rate per annum equal to, at our option, (i) the adjusted London Interbank Offered Rate ("LIBOR") or (ii) an alternate base rate, in each case plus the applicable interest rate margin. Borrowings will fluctuate between adjusted LIBOR plus 1.5% per annum and adjusted LIBOR plus 2.0% per annum (or between the alternate base rate plus 0.5% per annum and the alternate base rate plus 1.0% per annum), based upon our leverage ratio. The average interest rate during the twelve months ended December 31, 2019 was 3.9%.

Fees payable on the unused portion of the Revolving Facility will be 25 basis points per annum, unless the average usage of the Revolving Facility is equal to or less than \$30.0 million for the applicable period, in which case the fees on the unused portion of the Revolving Facility will be 0.375% per annum.

At December 31, 2019 and 2018, there was no outstanding balance under the Revolving Facility.

Debt Financing Costs

As a result of the Second Amendment, we incurred \$0.4 million in financing fees that were capitalized and will be amortized over the remaining life of the related debt, \$0.2 million of which was related to the Term Loan and \$0.2 million of which was related to the Revolving Facility. Pursuant to GAAP, the Second Amendment is accounted for as a debt modification. As a result, the unamortized deferred debt financing costs related to the Revolving Facility prior to the Second Amendment were added to the \$0.2 million of deferred debt financing costs related to the Second Amendment and will be amortized over the remaining life of the Revolving Facility.

Debt financing costs are deferred and amortized, using the straight-line method, which approximates the effective interest method, for costs related to the Term Loan and the straight-line method for costs related to the Revolving Facility over the term of the debt arrangement; such amortization is included in interest expense in the Consolidated Statements of Operations. Amortization of deferred debt financing costs was not material for the years ended December 31, 2019, 2018 and 2017. At December 31, 2019 and 2018, the remaining unamortized deferred debt financing costs were \$0.4 million and \$0.5 million, of which, at December 31, 2019 and 2018, \$0.2 million was offset against debt. At December 31, 2019 and 2018, \$0.3 million of the remaining unamortized deferred debt financing costs were recorded in prepaid expenses and other current assets and other assets on the Consolidated Balance Sheets, as they pertained to the Revolving Facility.

10. Commitments and Contingencies

Legal Liability to Landlord Insurance

We have a wholly owned subsidiary, Terra Mar Insurance Company, Inc., which was established to provide our customers with the option to purchase legal liability to landlord insurance. If our customers choose to use our insurance services, they are issued an insurance policy underwritten by our third-party service provider. The policy has a limit of \$100,000 per incident for each insured residence. We have entered into a reinsurance agreement with our third-party service provider and, as a result, we assume a 100% quota share of the legal liability to landlord insurance provided to our customers through our third-party service provider. Included in cost of revenue we accrue for reported claims, and an estimate of losses incurred but not reported by our property management customers, as we bear the risk related to claims. Our liability for reported claims and incurred but not reported claims at December 31, 2019 and 2018 was \$1.8 million and \$0.6 million, respectively, and is included in other current liabilities on the Consolidated Balance Sheets.

Included in prepaid expenses and other current assets as of December 31, 2019 and 2018 are \$1.3 million and \$1.8 million, respectively, of deposits held with a third party related to requirements to maintain collateral for our insurance services.

Legal Proceedings

In July 2019, we received a Request for Information from the Civil Rights Division (Housing and Civil Enforcement Section) of the U.S. Department of Justice ("DOJ") requesting certain information relating to our compliance with the Servicemembers Civil Relief Act in connection with our tenant screening Value+ service. We continue to fully cooperate with the DOJ, and do not presently have sufficient information to predict the outcome of, or any potential costs or penalties associated with, the DOJ investigation.

In December 2018, we received a Civil Investigative Demand from the Federal Trade Commission ("FTC") requesting certain information relating to our compliance with the Fair Credit Reporting Act in connection with our tenant screening Value+ service. We continue to fully cooperate with the FTC, and do not presently have sufficient information to predict the outcome of, or any potential costs or penalties associated with, the FTC investigation.

In addition, from time to time, we are involved in various other investigatory inquiries or legal proceedings arising from or related to matters incident to the ordinary course of our business activities, including actions with respect to intellectual property, employment, regulatory and contractual issues. Although the results of such investigatory inquiries and legal proceedings cannot be predicted with certainty, we believe that we are not currently a party to any investigatory inquiries or legal proceeding(s) which, 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.

Indemnification

In the ordinary course of business, we may provide indemnification of varying scope and terms to customers, investors, directors and officers with respect to certain matters, including, but not limited to, losses arising out of our breach of any applicable agreements, services to be provided by us, or intellectual property infringement claims made by third parties. These indemnification provisions may survive termination of the underlying agreement and the maximum potential amount of future payments we could be required to make under these indemnification provisions may not be subject to maximum loss clauses and is indeterminable. We have never paid a material claim, nor have any legal claims been brought against us, in connection with these indemnification arrangements. At December 31, 2019 and 2018, we have not accrued a liability for these indemnification arrangements because we determined that the likelihood of incurring a payment obligation, if any, in connection with these indemnification arrangements is not probable or reasonably possible and the amount or range of amounts of any such liability is not reasonably estimable.

11. Stockholders' Equity

Amended and Restated Certificate of Incorporation

Upon the effectiveness of our Amended and Restated Certificate of Incorporation on June 25, 2015, the number of shares of capital stock that is authorized to be issued was increased to 325,000,000 shares, of which 250,000,000 shares are Class A common stock, 50,000,000 shares are Class B common stock and 25,000,000 are undesignated preferred stock. The Class A common stock, Class B common stock and preferred stock have a par value of \$0.0001 per share.

At December 31, 2019, there were 16,552,000 shares of Class A common stock outstanding, 17,594,000 shares of Class B common stock outstanding and no preferred shares outstanding.

Class A Common Stock and Class B Common Stock

Except for voting rights, or as otherwise required by applicable law, the shares of our Class A common stock and Class B common stock have the same powers, preferences and rights and rank equally, share ratably and are identical in all respects as to all matters. The rights and preferences are as follows:

Dividend Rights. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of outstanding shares of our Class A common stock and Class B common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that our Board of Directors may determine.

Voting Rights. The holders of our Class A common stock are entitled to one vote per share, and holders of our Class B common stock are entitled to 10 votes per share. The holders of our Class A common stock and Class B common stock will vote together as a single class on all matters submitted to a vote of our stockholders, unless otherwise required by Delaware law or our amended and restated certificate of incorporation. Delaware law could require either holders of our Class A common stock or holders of our Class B common stock to vote separately. In addition, our amended and restated certificate of incorporation requires the approval of the holders of at least a majority of the outstanding shares of our Class B common stock, voting as a separate class to approve a change-in-control transaction.

Conversion. Upon the closing of our initial public offering ("IPO"), all shares of our convertible preferred stock and common stock held prior to the offering were converted into shares of Class B common stock. Currently, each share of our Class B common stock is convertible at any time at the option of the holder into one share of our Class A common stock. In addition, each share of our Class B common stock will convert into one share of our Class A common stock upon any transfer, whether or not for value, except for certain transfers described in our amended and restated certificate of incorporation, including, without limitation, (i) a transfer by a partnership or limited liability company that was a registered holder of our Class B common stock at the "effective time," as defined in our amended and restated certificate of incorporation, to a partner or member thereof at the effective time or (ii) a transfer to a "qualified recipient," as defined in our amended and restated certificate of incorporation.

All the outstanding shares of our Class B common stock will convert automatically into shares of our Class A common stock upon the date when the number of outstanding shares of our Class B common stock represents less than 10% of all outstanding shares of our Class A common stock and Class B common stock. Once converted into our Class A common stock, our Class B common stock may not be reissued.

Right to Receive Liquidation Distributions. Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our Class A common stock and Class B common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Preferred Stock

Effective upon the filing of our amended and restated certificate of incorporation in June 2015, no shares of preferred stock were outstanding because all outstanding shares of our convertible preferred stock converted into our Class B common stock.

Pursuant to the terms of our amended and restated certificate of incorporation, our Board of Directors will be authorized, subject to limitations prescribed by Delaware law, to issue up to 25,000,000 shares of our preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further action by our stockholders. The number of authorized shares of any series of preferred stock may be increased or decreased, but not below the number of shares of that series then outstanding, by the affirmative vote of the holders of a majority of the voting power of our outstanding capital stock entitled to vote thereon, or such other vote as may be required by the certificate of designation establishing the series.

Share Repurchase Program

On February 20, 2019, the Board of Directors (the "Board") authorized a \$100.0 million Share Repurchase Program (the "Program") of our outstanding Class A Common Stock. Under the Program, share repurchases may be made from time to time, as directed by a Committee consisting of three Directors, in open market purchases or privately negotiated transactions at a repurchase price that the members of the Committee unanimously believe is below intrinsic value conservatively determined. The Program does not obligate us to repurchase any specific dollar amount or number of shares, there is no expiration date to the Program, and it may be modified, suspended or terminated at any time and for any reason. We did not repurchase any Class A Common Stock under the Program during the year ended December 31, 2019.

In October 2018, our Board authorized a \$30.0 million Share Repurchase Program of its outstanding Class A Common Stock. Pursuant to this program, the Company has repurchased 370,751 shares for an aggregate purchase price of \$21.6 million. The balance of \$8.4 million remaining under the October authorization is included within the \$100.0 million Share Repurchase Program authorized on February 20, 2019.

12. Stock-Based Compensation

2015 Stock Incentive Plan

In conjunction with our IPO in 2015, our Board of Directors and stockholders adopted the 2015 Stock Incentive Plan (the "2015 Plan"). Upon adoption of the 2015 Plan, 2,000,000 shares of our Class A common stock were reserved and available for grant and issuance. On January 1 of each subsequent calendar year, the number of shares available for grant and issuance under the 2015 Plan increase by the lesser of (i) the number of shares of our Class A common stock subject to awards granted under the 2015 Plan during the preceding calendar year and (ii) such lesser number of shares of our Class A common stock determined by our Board of Directors. At December 31, 2019, we have reserved an aggregate of 3,977,621 shares of our Class A common stock for grant and issuance under the 2015 Plan. The number of shares of our Class A common stock is also subject to adjustment in the event of a recapitalization, stock split, reclassification, stock dividend or other change in our capitalization. The 2015 Plan authorizes the award of stock options, stock appreciation rights, RSAs, RSUs, performance awards and stock bonuses. The 2015 Plan provides for the grant of awards to our employees, directors, consultants and independent contractors, subject to certain exceptions. RSUs, PSUs, and RSAs have been issued during 2019 pursuant to the 2015 Plan.

Stock options may vest based on the passage of time or the achievement of performance conditions at the discretion of our compensation committee. Our compensation committee may provide for stock options to be exercised only as they vest or to be immediately exercisable with any shares issued on exercise being subject to our right of repurchase that lapses as the shares vest. The maximum term of stock options granted under the 2015 Plan is 10 years.

RSUs and PSUs represent the right on the part of the holder to receive shares of our Class A common stock at a specified date in the future or the achievement of performance conditions at the discretion of our compensation committee, subject to forfeiture of that right due to termination of employment. If an RSU or PSU has not been forfeited, then, on the specified date, we will deliver to the holder of the RSU or PSU shares of our Class A common stock.

2007 Stock Incentive Plan

On February 14, 2007, our Board of Directors adopted the 2007 Stock Incentive Plan (the "2007 Plan") as an amendment and restatement to an original 2006 Equity Incentive Plan and was most recently amended in July 2014. Following our IPO, our Board of Directors determined not to make any further awards under the 2007 Plan. The 2007 Plan expired on February 14, 2017. The 2007 Plan will continue to govern outstanding awards granted under the 2007 Plan.

Stock Options

A summary of our stock option activity for the year ended December 31, 2019 is as follows (number of shares in thousands):

	Number of Shares	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Life in Years
Options outstanding at December 31, 2018	1,513	\$ 11.31	6.4
Options granted	—	—	
Options exercised	(120)	4.60	
Options cancelled/forfeited	(51)	13.41	
Options outstanding at December 31, 2019	<u>1,342</u>	<u>\$ 11.84</u>	<u>5.9</u>

At December 31, 2019:

Options vested and expected to vest	1,342	\$ 11.84	5.1
Options exercisable ⁽¹⁾	1,325	\$ 11.93	5.9

⁽¹⁾ Included in the options exercisable is 15,000 shares which have an early exercise option. The weighted average exercise price of these options is \$5.64 per share and the weighted average contractual life in years is 5.1 years.

Included in the options outstanding as of December 31, 2019 are 172,000 PSOs granted in 2017. Vesting of these PSOs is based on the achievement of pre-established performance targets for the year ending December 31, 2019 and continued employment throughout the performance period. Of these PSOs, 132,000 shares vest based on the achievement of a pre-established free cash flow performance target for the year ending December 31, 2019, assuming achievement of the performance metric at the maximum level, which is 150% of the performance target, resulting in a maximum payout of 100% of the initial target award. The remaining 40,000 PSOs have a pre-established adjusted gross margin target for the year ending December 31, 2019. PSOs tied to the gross margin performance target have two levels of vesting, with 50% vesting based on the achievement of 110% of the targeted amount and the remaining 50% vesting based on the achievement of 115% of the targeted amount.

During the year ended December 31, 2019, 200,000 PSOs vested based on the achievement of 120% of the pre-established free cash flow performance target for the year ended December 31, 2018.

We recognize expense for the PSOs based on the grant date fair value of the PSOs that we determine are probable of vesting. Adjustments to compensation expense are made each period based on changes in our estimate of the number of PSOs that are probable of vesting. Our stock-based compensation expense for stock options for the years ended December 31, 2019, 2018 and 2017 was \$0.6 million, \$1.6 million, and \$2.9 million, respectively.

The fair value of stock options is estimated on their date of grant using the Black-Scholes option-pricing model. No stock options were granted during the years ended December 31, 2019 and 2018.

At December 31, 2019, the total remaining stock-based compensation expense for unvested stock options was \$0.1 million, which is expected to be recognized over a weighted average period of 0.9 years.

The total intrinsic value of options exercised in 2019, 2018 and 2017 was \$11.5 million, \$7.5 million, and \$4.6 million, respectively. This intrinsic value represents the difference between the fair value of our common stock on the date of exercise and the exercise price of each option. Based on the fair value of our common stock at December 31, 2019, the total intrinsic value of all outstanding options was \$131.7 million. The total intrinsic value of exercisable options at December 31, 2019 was \$129.8 million. The total intrinsic value of options vested and expected to vest at December 31, 2019 was \$131.7 million.

The excess tax benefit realized from option exercises during the years ended December 31, 2019, 2018 and 2017 was \$20.5 million, \$7.7 million and \$5.2 million, respectively.

Restricted Stock Units

A summary of activity in connection with our RSUs for the year ended December 31, 2019 is as follows (number of shares in thousands):

	Number of Shares	Weighted Average Grant Date Fair Value per Share
Unvested at December 31, 2018	674	\$ 32.61
Granted	216	89.10
Vested	(198)	26.78
Forfeited	(46)	43.97
Unvested at December 31, 2019	<u><u>646</u></u>	<u><u>\$ 52.42</u></u>

During the year ended December 31, 2019, we granted a total of 216,000 RSUs and PSUs: 173,000 RSUs vest annually over four years; 37,000 PSUs vest based on the achievement of a pre-established consolidated net revenue growth target for each of the years ending December 31, 2020, 2021 and 2022 and continued employment throughout the performance period; and 6,000 PSUs were granted and vested as a result of the achievement of a pre-established free cash flow performance target for the year ended December 31, 2018. The number of PSUs granted, as included in the above table, assumes achievement of the performance metric at 100% of the targeted performance metric. The actual number of shares to be issued at the end of the performance period will range from 0% to 100% of the initial target awards. Achievement of the performance target between 100% and 150% of the performance target will result in a performance-based cash bonus payment between 100% and 165% of the initial target awards.

During the year ended December 31, 2019, 29,000 of the PSUs vested and an additional 6,000 PSUs were granted and vested based on the achievement of 120% of the pre-established free cash flow performance target for the year ended December 31, 2018.

Included in the unvested RSUs and PSUs at December 31, 2019 are 95,000 and 88,000 PSUs granted in 2018 and 2017, respectively. Of the PSUs granted in 2018, 54,000 vest based on the achievement of a pre-established consolidated net revenue growth target for the year ending December 31, 2020 and 41,000 vest based on the achievement of a pre-established consolidated net revenue growth target for the year ending December 31, 2021. Vesting of the PSUs granted in 2017 is based on the achievement of pre-established free cash flow performance targets for the year ending December 31, 2019, and continued employment throughout the performance period. The number of PSUs granted assumes achievement of the performance metric at 100% of the performance target. For the PSUs granted in 2018, the actual number of shares to be issued at the end of the performance period will range from 0% to 100% of the initial target awards. Achievement of the performance target between 100% and 150% of the performance target will result in a performance based cash bonus payment between 100% and 165% of the initial target awards. For the PSUs granted in 2017, the actual number of shares to be issued at the end of the performance period will range from 0% to 165% of the initial target award.

We recognize expense for the PSUs based on the grant date fair value of the PSUs that we determine are probable of vesting. Adjustments to compensation expense are made each period based on changes in our estimate of the number of PSUs that are probable of vesting. Our stock-based compensation expense for the RSUs and PSUs for the years ended December 31, 2019, 2018 and 2017, was \$8.3 million, \$5.5 million and \$3.6 million, respectively.

At December 31, 2019, the total remaining stock-based compensation expense for these RSUs was \$21.8 million, which is expected to be recognized over a weighted average period of 1.9 years.

Restricted Stock Awards

A summary of activity in connection with our RSAs for the year ended December 31, 2019 is as follows (number of shares in thousands):

	Number of Shares	Weighted-Average Grant Date Fair Value per Share
Unvested at December 31, 2018	6	\$ 51.36
Granted	5	105.88
Vested	(6)	51.36
Forfeited	—	—
Unvested at December 31, 2019	<u><u>5</u></u>	<u><u>\$ 105.88</u></u>

We have the right to repurchase any unvested RSAs subject to certain conditions. RSAs vest over a four-year period for employees and over a one-year period for non-employee directors. For the years ended December 31, 2019, 2018 and 2017, we recognized stock-based compensation expense for RSAs of \$0.3 million, \$0.3 million and \$0.4 million, respectively. During 2019, the grant date fair value of the shares vested was \$0.3 million.

At December 31, 2019, the total remaining stock-based compensation expense for unvested RSAs was \$0.4 million, which is expected to be recognized over a weighted average period of 0.8 years.

13. Income Taxes

For the year ended December 31, 2019, we recorded an income tax benefit of \$31.5 million. During the second quarter of 2019, the Company evaluated all available positive and negative evidence, including the Company's sustained profitability in 2018 and 2019, the impact of recent acquisitions and future projections of profitability. As a result, the Company determined that all of its deferred tax assets were more likely than not to be realized and reversed the valuation allowance against those deferred tax assets accordingly.

For the years ended December 31, 2018 and 2017, we recorded income tax expense of \$420,000 and \$58,000, respectively, associated with state taxes and the amortization of tax deductible goodwill that is not an available source of income to realize the deferred tax asset.

Our effective tax rate differs from the United States federal statutory rate of 21% primarily because, in years prior to 2019, our reported losses were offset by a valuation allowance due to uncertainty as to the realization of those losses while, in 2019, we released such valuation allowance. Set forth below is a reconciliation of the components that caused our provision for income taxes to differ from amounts computed by applying the United States federal statutory rate of 21% for the years ended December 31, 2019 and 2018, and 34% for the year ended December 31, 2017:

	Year Ended December 31,		
	2019	2018	2017
Income tax benefit at the statutory rate	21 %	21 %	34 %
State and local income taxes, net of federal benefit	(53)	(3)	(14)
Stock-based compensation expense	(88)	(7)	(15)
Meals and entertainment	7	1	2
Change in valuation allowance	(475)	(1)	(60)
Change in federal rate	—	—	74
Research and development tax credits	(64)	(9)	(20)
Provision for (benefit from) income taxes	<u>(652)%</u>	<u>2 %</u>	<u>1 %</u>

The provision for income tax consists of the following (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Current			
Federal	\$ —	\$ —	\$ —
State and local	(15)	339	53
Current income tax expense	<u>(15)</u>	<u>339</u>	<u>53</u>
Deferred			
Federal	(18,761)	65	(2)
State and local	(12,683)	16	7
Deferred income tax (benefit) expense	<u>(31,444)</u>	<u>81</u>	<u>5</u>
Total income tax provision (benefit)	<u>\$ (31,459)</u>	<u>\$ 420</u>	<u>\$ 58</u>

The components of deferred tax assets (liabilities) were as follows (in thousands):

December 31,

	2019	2018
Deferred income tax assets:		
Net operating loss carryforwards	\$ 22,525	\$ 15,675
Research and development tax credits	17,700	11,907
Intangible assets	—	143
Stock-based compensation	2,895	2,203
Lease asset	8,291	—
Other	1,692	2,878
Gross deferred tax assets	<u>53,103</u>	<u>32,806</u>
Valuation allowance	—	(23,002)
Deferred tax assets, net of valuation allowance	53,103	9,804
Deferred tax liabilities:		
Property, equipment and software	(7,965)	(5,464)
Intangible assets	(3,767)	—
Capitalized commissions	(2,492)	(1,825)
State taxes	(2,563)	(1,935)
Lease liability	(7,152)	—
Other	(1,590)	(739)
Total deferred tax liabilities	<u>(25,529)</u>	<u>(9,963)</u>
Total net deferred tax assets (liabilities)	<u>\$ 27,574</u>	<u>\$ (159)</u>

At December 31, 2019, we had federal net operating loss carryforwards of \$82.1 million, which will begin to expire in 2031. At December 31, 2019, we had state net operating loss carryforwards of \$65.9 million, which will begin to expire in 2028. At December 31, 2019, we also had federal and state research and development credit carryforwards of \$11.4 million and \$10.8 million, respectively. The federal credit carryforwards will begin to expire in 2027, while the majority of state credits carryforwards apply indefinitely.

The Internal Revenue Code of 1986, as amended (“IRC”), imposes substantial restrictions on the utilization of NOLs and other tax attributes in the event of an “ownership change” of a corporation. Accordingly, a company’s ability to use pre-change NOLs may be limited as prescribed under IRC Section 382. Events which may cause limitation in the amount of the NOLs and credits that we utilize in any one year include, but are not limited to, a cumulative ownership change of more than 50% over a rolling three-year period. We have undertaken an NOL/382 analysis and have determined that there are no limitations on the NOL carryforwards at December 31, 2019.

The change in the valuation allowance for the years ended December 31, 2019, 2018 and 2017 was as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Valuation allowance, at beginning of year	\$ 23,002	\$ 23,827	\$ 29,417
Decrease in valuation allowance	(23,002)	(825)	(5,590)
Valuation allowance, at end of year	\$ —	\$ 23,002	\$ 23,827

The following is a reconciliation of the total amounts of unrecognized tax benefits (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Unrecognized tax benefit beginning of year	\$ 2,977	\$ 2,105	\$ 4,032
Decreases-tax positions in prior year	—	—	(2,210)
Increases-tax positions in current year	1,444	872	283
Unrecognized tax benefit end of year	\$ 4,421	\$ 2,977	\$ 2,105

The unrecognized tax benefits are recorded as a reduction to the deferred tax assets.

At December 31, 2019 and 2018, we had no accrued interest and penalties related to uncertain income tax positions. We do not anticipate that the amount of unrecognized tax benefits will significantly increase or decrease within the next twelve months.

We are subject to taxation in the United States and various states. Due to the net operating loss carryforwards, our federal and state returns are open to examination by the Internal Revenue Service and state jurisdictions for all years since inception. We are not currently under audit by any taxing authorities.

14. Revenue and Other Information

The following table presents our revenue categories for the years ended December 31, 2019, 2018 and 2017 (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Core solutions	\$ 88,581	\$ 70,549	\$ 57,132
Value+ services	153,994	113,072	80,847
Other	13,437	6,450	5,824
Total revenue	<u>\$ 256,012</u>	<u>\$ 190,071</u>	<u>\$ 143,803</u>

Our revenue is generated primarily from United States customers. All of our property and equipment is located in the United States.

15. Retirement Plans

We have a 401(k) retirement and savings plan made available to all employees. The 401(k) plan allows each participant to contribute up to an amount not to exceed an annual statutory maximum. We may, at our discretion, make matching contributions to the 401(k) plan. Cash contributions to the plan were \$2.5 million, \$1.6 million and \$0.8 million, for the years ended December 31, 2019, 2018 and 2017, respectively.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the supervision and participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures at December 31, 2019, the last day of the period covered by this Annual Report. Disclosure controls and procedures include, without limitation, controls and other procedures designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms and that such information is accumulated and communicated to its management, including its principal executive officer and principal financial officer, as appropriate, to allow timely decisions regarding required disclosure. Based on our management's evaluation, our principal executive officer and principal financial officer have concluded that, at December 31, 2019, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act). Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, 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. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As of December 31, 2019, our management assessed the effectiveness of our internal control over financial reporting using the criteria set forth in the *Internal Control – Integrated Framework* (2013) as issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. We have excluded Dynasty from our assessment of internal control over financial reporting because it was acquired in a business combination during the year ended December 31, 2019. Dynasty constituted 1% of total assets and 1% of total revenue as of and for the year ending December 31, 2019. Based on our evaluation under the COSO criteria, our management concluded that our internal control over financial reporting was effective at the reasonable assurance level as of December 31, 2019.

The effectiveness of our internal control over financial reporting has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their audit report which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting at December 31, 2019.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rules 13(a)-15(d) and 15d-15(d) under the Exchange Act that occurred during the quarter ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on Effectiveness of Disclosure Controls and Procedures and Internal Control over Financial Reporting

In designing and evaluating our disclosure controls and procedures and internal control over financial reporting, our management recognizes that any system of controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. There are inherent limitations to the effectiveness of any system of controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. In addition, the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that 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.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item will be included in the Proxy Statement or an amendment to this Annual Report, which will be filed with the SEC not later than 120 days after the end of our fiscal year ended December 31, 2019, and is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be included in the Proxy Statement or an amendment to this Annual Report and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be included in the Proxy Statement or an amendment to this Annual Report and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be included in the Proxy Statement or an amendment to this Annual Report and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item will be included in the Proxy Statement or an amendment to this Annual Report and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENTS SCHEDULES

The following documents are filed as part of this Annual Report:

1. Consolidated Financial Statements

Our consolidated financial statements are listed in the "Index to Consolidated Financial Statements" under Part II, Item 8, of this Annual Report.

2. Financial Statement Schedules

All financial statement schedules have been omitted because they are not required or are not applicable, or the required information is shown in our Consolidated Financial Statements or the notes thereto.

3. Exhibits

The documents listed in the Exhibit Index of this Annual Report are filed or furnished with, or incorporated by reference into, this Annual Report, in each case as indicated therein.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				
		Form	File No.	Exhibit	Filing Date	Filed Herewith
2.1	Asset Purchase Agreement, dated August 31, 2018, by and between AppFolio Utility Management, Inc. and WegoWise, Inc.	8-K	001-37468	2.1	9/4/2018	
2.2	Agreement and Plan of Merger, dated January 7, 2019, by and among the registrant, Riviera Mar, Inc., Dynasty Marketplace, Inc. and Fortis Advisors LLC.	8-K	001-37468	2.1	1/8/2019	
3.1	Amended and Restated Certificate of Incorporation of the registrant as currently in effect.	10-Q	001-37468	3.1	8/6/2015	
3.2	Amended and Restated Bylaws of the registrant as currently in effect.	10-Q	001-37468	3.2	8/6/2015	
4.1	Specimen Certificate for Class A Common Stock.	S-1/A	333-204262	4.1	6/4/2015	
4.2	Amended and Restated Investor Rights Agreement, by and among the registrant and the investors named therein, dated November 26, 2013.	S-1/A	333-204262	4.2	6/4/2015	
4.3	Description of Capital Stock of the registrant.					X
10.1	Multi-Tenant Industrial Lease, by and between the registrant and Nassau Land Company, L.P., dated April 1, 2011 ("2011 Lease"), as amended by First Amendment to 2011 Lease, dated November 11, 2011, Second Amendment to 2011 Lease, dated February 23, 2012, and Third Amendment to 2011 Lease, dated November 5, 2013.	S-1/A	333-204262	10.1	6/4/2015	
10.2	Fourth Amendment to 2011 Lease, by and between the registrant and Nassau Land Company, L.P., dated February 22, 2017.	10-K	001-37468	10.2	2/27/2017	
10.3	Multi-Tenant Industrial Lease, by and between the registrant and Nassau Land Company, L.P., dated February 17, 2015 ("2015 Lease").	S-1/A	333-204262	10.2	6/4/2015	
10.4	First Amendment to 2015 Lease, by and between the registrant and Nassau Land Company, L.P., dated October 5, 2015.	10-Q	001-37468	10.2	11/9/2015	
10.5	Second Amendment to 2015 Lease, by and between the registrant and Nassau Land Company, L.P., dated February 22, 2016.	10-K	001-37468	10.2	2/29/2016	
10.6	Third Amendment to Lease, by and between the registrant and Nassau Land Company, L.P., dated July 1, 2018.	10-Q	001-37468	10.1	7/30/2018	

Exhibit Number	Incorporated by Reference					Filed Herewith
	Exhibit Description	Form	File No.	Exhibit	Filing Date	
10.7	Multi-Tenant Industrial Lease, by and between the registrant and Nassau Land Company, L.P., dated July 1, 2018.	10-Q	001-37468	10.2	7/30/2018	
10.8	WeWork membership Agreement, by and between the registrant and WeWork, dated September 28, 2018.	10-K	001-37468	10.8	2/28/2019	
10.9#	2007 Stock Incentive Plan, as amended, and related form agreements.	S-1/A	333-204262	10.3	6/4/2015	
10.10#	2015 Stock Incentive Plan and related form agreements.	S-1/A	333-204262	10.4	6/4/2015	
10.11#	2015 Employee Stock Purchase Plan.	S-1/A	333-204262	10.5	6/4/2015	
10.12#	Long-Term Cash Incentive Plan.	10-K	001-37468	10.9	2/26/2018	
10.13#	Form of Long-Term Cash Incentive Award Offer.	10-K	001-37468	10.10	2/26/2018	
10.14	Form of Indemnification Agreement by and between the registrant and each of its executive officers and directors.					X
10.15	Credit Agreement, by and among the registrant, Wells Fargo Bank, N.A., as administrative agent, and the lenders that are parties thereto, dated March 16, 2015.	S-1	333-204262	10.7	5/18/2015	
10.16	Amendment Number One to Credit Agreement, by and among the registrant, Wells Fargo Bank, N.A., as administrative agent, and the lenders that are parties thereto, dated October 9, 2015.	10-Q	001-37468	10.1	11/9/2015	
10.17	Amendment Number Two to Credit Agreement, by and among the registrant, Wells Fargo Bank, N.A., as administrative agent, and the lenders that are parties thereto, dated December 24, 2018.	10-K	001-37468	10.17	2/28/2019	
10.18	Resignation Agreement and General Release of Claims by and between the registrant and Brian Donahoo, dated August 3, 2017.	8-K	001-37468	10.1	8/7/2017	
21.1	Subsidiaries of the registrant.					X
23.1	Consent of independent registered public accounting firm.					X
24.1	Power of Attorney (included on the signature page of this report).					X
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.					X
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) or Rule 15d-14(a) promulgated under the Securities Exchange Act of 1934, as amended.					X

Incorporated by Reference						
Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
32.1*	<u>Certifications of Chief Executive Officer and Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					X

Indicates a management contract or compensatory plan or arrangement

* The certifications attached as Exhibit 32.1 accompany this Annual Report pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed "filed" by the registrant for purposes of Section 18 of the Exchange Act and are not to be incorporated by reference into any of the registrant's filings under the Securities Act or the Exchange Act, irrespective of any general incorporation language contained in any such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this Annual Report to be signed on its behalf by the undersigned thereunto duly authorized.

AppFolio, Inc.

Date: March 2, 2020

By: /s/ Ida Kane

Ida Kane

Chief Financial Officer

(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below hereby constitutes and appoints Jason Randall and Ida Kane, and each or either of them, acting individually, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report, and to file the same, with all exhibits thereto and other documents in connection therewith, with the SEC, granting unto said attorney-in-fact and agent, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or any of them, or their or his or her substitutes, may lawfully do or cause to be done or by virtue hereof.

Pursuant to the requirements of the Exchange Act, as amended, this Annual Report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ Jason Randall Jason Randall	President, Chief Executive Officer and Director (Principal Executive Officer)	March 2, 2020
/s/ Ida Kane Ida Kane	Chief Financial Officer (Principal Financial and Accounting Officer)	March 2, 2020
/s/ Andreas von Blottnitz Andreas von Blottnitz	Chairman of the Board	March 2, 2020
/s/ Timothy Bliss Timothy Bliss	Director	March 2, 2020
/s/ Janet Kerr Janet Kerr	Director	March 2, 2020
/s/ James Peters James Peters	Director	March 2, 2020
/s/ William Rauth William Rauth	Director	March 2, 2020
/s/ Klaus Schauser Klaus Schauser	Chief Strategist and Director	March 2, 2020
/s/ Winifred Webb Winifred Webb	Director	March 2, 2020

DESCRIPTION OF CAPITAL STOCK

The following is a summary of all material characteristics of the capital stock of AppFolio, Inc., as set forth in our Amended and Restated Certificate of Incorporation, as amended, or our Charter, and our Amended and Restated Bylaws, or our Bylaws. References to "we," "us," and "our" refer to AppFolio, Inc. The summary does not purport to be complete and is qualified in its entirety by reference to our Charter and Bylaws, copies of which have been filed as exhibits to our public filings with the Securities and Exchange Commission.

Class A Common Stock and Class B Common Stock

General. We may issue shares of our common stock from time to time. We are currently authorized to issue 250,000,000 shares of Class A common stock, par value \$0.0001 per share, and 50,000,000 shares of Class B common stock, par value \$0.0001 per share. The rights, preferences and privileges of holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any of our outstanding preferred stock. See the section entitled "*Preferred Stock*".

Dividend Rights. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of outstanding shares of our Class A common stock and Class B common stock are entitled to receive dividends out of funds legally available at the times and in the amounts that our board of directors may determine.

Voting Rights. The holders of our Class A common stock are entitled to one vote per share, and holders of our Class B common stock are entitled to 10 votes per share. The holders of our Class A common stock and Class B common stock vote together as a single class on all matters submitted to a vote of our stockholders, unless otherwise required by Delaware law or our Charter. Delaware law could require either holders of our Class A common stock or holders of our Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our Charter to increase or decrease the par value of a class of our capital stock, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to amend our Charter in a manner that alters the powers, preferences or special rights of a class of our capital stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

In addition, our Charter provides that the approval of the holders of at least a majority of the outstanding shares of our Class B common stock, voting as a separate class, is required to approve a change-in-control transaction.

Our stockholders do not have the ability to cumulate votes for the election of directors. Our Charter and Bylaws provide for a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only one class of directors is elected at each annual meeting of stockholders, with the other classes continuing for the remainder of their respective three-year terms.

Identical Rights. Except as described in the section entitled "*-Voting Rights*", or as otherwise required by applicable law, the shares of our Class A common stock and Class B common stock have the same powers, preferences and rights and rank equally, share ratably and are identical in all respects as to all matters.

No Preemptive or Similar Rights. Our common stock is not entitled to preemptive rights, and is not subject to redemption. There are no sinking fund provisions applicable to our common stock.

Conversion. Our Class A common stock is not convertible. Each share of our Class B common stock is convertible at any time at the option of the holder into one share of our Class A common stock. In addition, each share of our Class B common stock will convert into one share of our Class A common stock upon any transfer, whether or not for value, except for certain transfers described in our Charter, including, without limitation, (i) a transfer by a partnership or limited liability company that was a registered holder of our Class B common stock at the "effective time," as defined in our Charter, to a partner or member thereof at the effective time, or (ii) a transfer to a "qualified recipient," as defined in our Charter. All of the outstanding shares of

our Class B common stock will convert automatically into shares of our Class A common stock upon the date when the number of outstanding shares of our Class B common stock represents less than 10% of all outstanding shares of our Class A common stock and Class B common stock. Once converted into our Class A common stock, our Class B common stock may not be reissued.

Right to Receive Liquidation Distributions. Upon our dissolution, liquidation or winding-up, the assets legally available for distribution to our stockholders are distributable ratably among the holders of our Class A common stock and Class B common stock, subject to prior satisfaction of all outstanding debt and liabilities and the preferential rights and payment of liquidation preferences, if any, on any outstanding shares of preferred stock.

Preferred Stock

Pursuant to the terms of our Charter, our board of directors is authorized, subject to limitations prescribed by Delaware law, to issue up to 25,000,000 shares of our preferred stock in one or more series, to establish from time to time the number of shares to be included in each series, and to fix the designation, powers, preferences and rights of the shares of each series and any of its qualifications, limitations or restrictions, in each case without further action by our stockholders. The number of authorized shares of any series of preferred stock may be increased or decreased, but not below the number of shares of that series then outstanding, by the affirmative vote of the holders of a majority of the voting power of our outstanding capital stock entitled to vote thereon, or such other vote as may be required by the certificate of designation establishing the series.

The issuance of preferred stock, while providing flexibility in connection with possible financings, acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deterring or preventing a change in our control or the removal of our incumbent directors and officers, and could adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock.

Registration Rights

Certain holders of our Class B common stock have rights, subject to certain conditions and limitations, to include their shares in registration statements relating to our common stock. Subject to certain limitations, the holders of at least 40% of the shares subject to these registration rights have the right, on up to two occasions, to demand that we register such shares under the Securities Act of 1933, as amended, or the Securities Act. In addition, in the event we propose to register any shares of our common stock under the Securities Act either for our account or for the account of other security holders, such holders are entitled to receive notice of such registration and to include their shares of common stock in any such registration. Further, at any time when we are eligible to file a registration statement on Form S-3, any holder of shares subject to these registration rights may require us to file a registration statement under the Securities Act on Form S-3 with respect to shares of our common stock having an aggregate offering price, net of selling expenses, of at least \$500,000. These registration rights are subject to certain conditions and limitations, including the right of the underwriters of an offering to limit the number of shares of our common stock held by such holders to be included in such registration statement according to market factors. We are generally required to bear all of the expenses of such registrations. Registration of any of the shares of our common stock held by such holders would result in these shares becoming freely tradable without restriction under the Securities Act immediately upon effectiveness of the applicable registration statement.

These registration rights terminate with respect to any holder upon the earliest to occur of (i) the completion of certain liquidation events, (ii) such time as Rule 144 under the Securities Act (or another similar exemption) is available for the sale of all of such holder's shares that are subject to these registration rights, and (iii) the fifth anniversary of our initial public offering.

Antitakeover Provisions of Delaware Law, Our Charter and Bylaws

Certain provisions of Delaware law, as well as our Charter and Bylaws, may have the effect of delaying, deterring or preventing another person from acquiring control of us, or removing incumbent officers and directors. These provisions are expected to discourage certain types of coercive takeover practices and takeover bids that our board of directors may consider inadequate and to encourage any person seeking to acquire control of us to first negotiate with our board of directors. We believe the benefits of increased protection of our ability to negotiate with the proponent of an unsolicited proposal to acquire us or remove our incumbent directors and officers, outweighs the disadvantages of discouraging these proposals because, among other things, negotiation of these proposals could result in an improvement of their terms and potential benefits to our stockholders.

Dual Class Common Stock. As described above in the section entitled "Class A Common Stock and Class B Common Stock," our Charter provides for a dual class common stock structure, which provides the holders of our Class B common stock with significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale transaction.

Delaware Law. We are governed by the provisions of Section 203 of the DGCL regulating corporate takeovers. This section prevents some Delaware corporations from engaging, under certain circumstances, in a business combination, which includes a merger or sale of at least 10% of the corporation's assets, with any interested stockholder, meaning a stockholder who, together with its affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of the corporation's outstanding voting stock, unless:

- the transaction is approved by the board of directors prior to the time that the interested stockholder became an interested stockholder;
- upon consummation of the transaction that resulted in the stockholder's becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced; or
- subsequent to such time that the stockholder became an interested stockholder, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders by at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Charter and Bylaw Provisions. Our Charter and Bylaws include a number of other provisions that could deter hostile takeovers or delay, deter or prevent changes in control or the removal of our incumbent directors or officers, including the following:

- *Supermajority Approvals.* Our Charter provides that the affirmative vote of the holders of at least 66 2/3% of the combined voting power of our then-outstanding capital stock is required to amend our Charter, and our Bylaws provide that the affirmative vote of the holders of at least 80% of the combined voting power of our then-outstanding capital stock is required to amend our Bylaws.
- *Change-in-Control Approval.* In addition to any approvals required under the DGCL, our Charter provides that the approval of the holders of at least a majority of the outstanding shares of our Class B common stock, voting as a separate class, is required to approve a change-in-control transaction.
- *Director Appointments; Filling Vacancies.* Our Charter and Bylaws authorize our board of directors to fill vacant directorships. In addition, the number of directors on our board of directors is fixed exclusively by our board of directors. Newly created directorships resulting from any increase in our authorized number of directors, and any vacancies on our board of directors resulting from death, resignation, retirement, disqualification, removal from office or other cause, are filled generally by the majority vote of our remaining directors then in office, even if less than a quorum is present.
- *Classified Board.* Our Charter and Bylaws provide that our board of directors is classified into three classes of directors, each of which holds office for a three-year term. In addition, directors may only be removed from our board of directors for cause and then only by the affirmative vote of the holders of at least a majority of the combined voting power of our outstanding capital stock.
- *Stockholder Action; Special Meeting of Stockholders.* Our Charter provides that our stockholders may not take action by written consent and may only take action at annual or special meetings of our stockholders. Our Bylaws further provide that special meetings of our stockholders may only be called by a majority of our board of directors.
- *No Cumulative Voting.* The DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless the corporation's certificate of incorporation provides otherwise. Our Charter does not provide for cumulative voting.
- *Advance Notice Requirements for Stockholder Proposals and Director Nominations.* Our Bylaws provide advance notice procedures for stockholders seeking to bring business before an annual meeting of stockholders, or to nominate candidates for election as directors at an annual meeting of stockholders. In general, to be timely, a stockholder's notice must be delivered to, or mailed and received at, our principal executive offices not later than the 90th day nor earlier than the 120th day prior to the first anniversary of the preceding year's annual meeting of stockholders. Our Bylaws also specify certain requirements regarding the form and content of a stockholder's notice.
- *Issuance of Undesignated Preferred Stock.* Our board of directors has the authority, without further action by our stockholders, to issue up to 25,000,000 shares of undesignated preferred stock with powers, preferences and rights, including voting rights, designated from time to time by our board of directors.

- *Authorized but Unissued Shares.* Our authorized but unissued shares of our common stock and preferred stock will be available for future issuance without stockholder approval. We may use additional shares for a variety of purposes, including capital raising transactions, acquisitions and as employee compensation.
- *Exclusive Forum.* Our Charter provides that, 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 (i) any derivative action or proceeding brought on our behalf, (ii) 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, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, our Charter or our Bylaws, or (iv) any action asserting a claim against us governed by the internal affairs doctrine. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to the foregoing provisions.

LIST OF INDEMNITEES

Each of the individuals identified below is a party to an indemnification agreement with AppFolio, Inc. in the form attached herewith as Exhibit 10.14.

<u>Name</u>	<u>Date Signed</u>
Jon Walker	March 8, 2015
Timothy Bliss	March 8, 2015
Ida Kane	March 8, 2015
Andreas von Blottnitz	March 8, 2015
Klaus Schauser	March 8, 2015
Janet Kerr	March 12, 2015
James Peters	March 14, 2015
William Rauth	March 16, 2015
Jason Randall	August 3, 2017
Winifred Webb	December 1, 2019

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this “**Agreement**”), dated _____, 201 , is by and between AppFolio, Inc., a Delaware corporation (the “**Company**”), and _____ (“**Indemnitee**”).

RECITALS

A. Indemnitee is a director or an officer of the Company.

B. The board of directors of the Company (the “**Board**”) has determined that enhancing the ability of the Company to retain and attract as directors and officers the most capable persons is in the best interests of the Company and that the Company therefore should seek to assure such persons that indemnification is available.

C. In recognition of the need to provide Indemnitee with substantial protection against personal liability, in order to procure Indemnitee’s continued service as a director or officer of the Company and to enhance Indemnitee’s ability to serve the Company in an effective manner, and in order to provide such protection pursuant to express contract rights (intended to be enforceable irrespective of, among other things, any amendment to the Company’s certificate of incorporation or bylaws (collectively, the “**Constituent Documents**”), any change in the composition of the Board or any change in control or business combination transaction relating to the Company), the Company wishes to provide in this Agreement for the indemnification of, and the advancement of Expenses (as defined in Section 2 below) to, Indemnitee as set forth in this Agreement and to the extent insurance is maintained for the continued coverage of Indemnitee under the Company’s directors’ and officers’ liability insurance policies.

NOW, THEREFORE, in consideration of the foregoing and the Indemnitee’s agreement to continue to provide services to the Company, the parties hereby agree as follows:

1. **Services to the Company.** Indemnitee agrees to continue to serve as a director or officer of the Company for so long as Indemnitee is duly elected or appointed, until Indemnitee tenders Indemnitee's resignation or until Indemnitee is terminated by the Company, as applicable. This Agreement shall not be deemed an employment agreement between the Company (or any of its subsidiaries or another Enterprise) and Indemnitee. Indemnitee specifically acknowledges that Indemnitee's service to the Company or any of its subsidiaries or another Enterprise (as defined in Section 2 below) is at will and the Indemnitee may be discharged at any time for any reason, with or without cause, except as may be otherwise provided in any written employment agreement between Indemnitee and the Company (or any of its subsidiaries or another Enterprise), other applicable formal severance policies duly adopted by the Board or, with respect to service as a director or officer of the Company, by the Company's Constituent Documents or Delaware law. This Agreement shall continue in force after Indemnitee has ceased to serve as a director or officer of the Company or, at the request of the Company, of any of its subsidiaries or Enterprise, as defined in Section 2 below.

2. **Definitions.** For purposes of this Agreement, the following terms shall have the following meanings:

- (a) "**Agreement**" shall have the meaning ascribed to it in the prefatory language above.
- (b) "**Beneficial Owner**" has the meaning given to the term "beneficial owner" in Rule 13d-3 under the Exchange Act.
- (c) "**Board**" shall have the meaning ascribed to it in the Recitals above.
- (d) "**Business Combination**" means a reorganization, a merger or a consolidation.
- (e) "**Change in Control**" means the occurrence after the date of this Agreement of any of the following events:
 - (i) Acquisition of Stock by Third Party. Any Person (as defined below) who is not a current stockholder of the Company becomes hereafter the Beneficial Owner, directly or indirectly, of securities of the Company representing thirty percent (30%) or more of the Company's Voting Securities, unless the change in the relative Beneficial Ownership of the Company's securities by any Person results solely from a reduction in the aggregate number of outstanding Voting Securities;
 - (ii) Corporate Transactions. The consummation of a Business Combination, unless immediately following such Business Combination, (1) the Beneficial Owners of the Voting Securities of the Company immediately prior to such transaction beneficially own, directly or indirectly, more than fifty percent (50%) of the combined voting power of the outstanding Voting Securities of the entity resulting from such transaction, (2) no Person (excluding any corporation resulting from such Business Combination) is the Beneficial Owner, directly or indirectly, of twenty percent (20%) or more of the combined voting power of the then outstanding securities entitled to vote generally in the election of directors of such corporation except to the extent that such ownership existed prior to the Business Combination and (3) at least a majority of the Board of Directors of the corporation resulting from such Business Combination were Continuing Directors (as defined below), at the time of the execution of the initial agreement or of the action of the Board, providing for such Business Combination;

(iii) **Change in Board of Directors.** The Continuing Directors cease for any reason to constitute at least a majority of the members of the Board; or

(iv) **Liquidation.** The stockholders of the Company approve a plan of complete liquidation or dissolution of the Company or an agreement or series of agreements for the sale or disposition by the Company of all or substantially all of the Company's assets, other than factoring the Company's current receivables or escrows due (or, if such approval is not required, the decision by the Board to proceed with such a liquidation, sale, or disposition in one transaction or a series of related transactions).

(f) **"Claim"** means:

(i) any threatened, pending or completed action, suit, demand, proceeding or alternative dispute resolution mechanism, whether civil, criminal, administrative, arbitrative, investigative or other, and whether made pursuant to federal, state or other law; or

(ii) any inquiry, hearing or investigation that the Indemnitee determines might lead to the institution of any such action, suit, proceeding or alternative dispute resolution mechanism.

(g) **"Company"** shall have the meaning ascribed to it in the prefatory language above.

(h) **"Constituent Documents"** shall have the meaning ascribed to it in the Recitals above.

(i) **"Continuing Directors"** means, during a period of two consecutive years, not including any period prior to the execution of this Agreement, the individuals collectively who at the beginning of such period constituted the Board (including for this purpose any new directors whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved).

(j) **"Delaware Court"** means the Court of Chancery of the State of Delaware.

(k) **"Disinterested Director"** means a director of the Company who is not and was not a party to the Claim in respect of which indemnification is sought by Indemnitee.

(l) **"Enterprise"** means, any corporation, limited liability company, partnership, joint venture, trust or other entity.

(m) **"Exchange Act"** means the Securities Exchange Act of 1934, as amended.

(n) **"Expense Advance"** means any payment of Expense advanced to Indemnitee by the Company pursuant to Section 4 or Section 5 hereof.

(o) **"Expenses"** means any and all expenses, including attorneys' and experts' fees, court costs, transcript costs, travel expenses, duplicating, printing and binding costs, telephone charges, and all other costs and expenses incurred in connection with investigating, defending, being a witness in or participating in (including on appeal), or preparing to defend, be a witness or participate in, any

Claim. Expenses also shall include (i) Expenses incurred in connection with any appeal resulting from any Claim, including without limitation the premium, security for, and other costs relating to any cost bond, supersedes bond, or other appeal bond or its equivalent, and (ii) for purposes of Section 5 only, Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement, by litigation or otherwise. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(p) "**Indemnifiable Event**" means any event or occurrence, whether occurring before, on or after the date of this Agreement, related to the fact that Indemnitee is or was a director, officer, employee or agent of the Company or any subsidiary of the Company, or is or was serving at the request of the Company as a director, officer, employee, member, manager, trustee or agent of another Enterprise or by reason of an action or inaction by Indemnitee in any such capacity (whether or not serving in such capacity at the time any Loss (as defined below) is incurred for which indemnification can be provided under this Agreement).

(q) "**Indemnitee**" shall have the meaning ascribed to it in the prefatory language above.

(r) "**Independent Counsel**" means a law firm, or a member of a law firm, that is experienced in matters of corporate law and neither presently performs, nor in the past five (5) years has performed, services for either: (i) the Company or Indemnitee (other than in connection with matters concerning other indemnitees under similar agreements) or (ii) any other party to the Claim giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "Independent Counsel" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(s) "**Losses**" means any and all Expenses, damages, losses, liabilities, judgments, fines, penalties (whether civil, criminal or other), ERISA excise taxes, amounts paid or payable in settlement, including any interest, assessments, any federal, state, local or foreign taxes imposed as a result of the actual or deemed receipt of any payments under this Agreement and all other charges paid or payable in connection with investigating, defending, being a witness in or participating in (including on appeal), or preparing to defend, be a witness or participate in, any Claim.

(t) "**Notification Date**" shall have the meaning ascribed to it in Section 10(c) below.

(u) "**Other Indemnity Provisions**" shall have the meaning ascribed to it in Section 14 below.

(v) "**Person**" means any individual, corporation, firm, partnership, joint venture, limited liability company, estate, trust, business association, organization, governmental entity or other entity and includes the meaning set forth in Sections 13(d) and 14(d) of the Exchange Act.

(w) "**Standard of Conduct Determination**" shall have the meaning ascribed to it in Section 10(b) below.

(x) "**Voting Securities**" means any securities of the Company that vote generally in the election of directors.

3. **Indemnification.** Subject to the terms of this Agreement, the Company shall indemnify Indemnitee, to the fullest extent permitted by the laws of the State of Delaware in effect on the date hereof, or as such laws may from time to time hereafter be amended to increase the scope of such permitted indemnification, against any and all Losses if Indemnitee was or is or becomes a party to or participant in, or is threatened to be made a party to or participant in, any Claim by reason of or arising in part out of an Indemnifiable Event, including, without limitation, Claims brought by or in the right of the Company, Claims brought by third parties, and Claims in which the Indemnitee is solely a witness.

4. **Advancement of Expenses.** Indemnitee shall have the right to advancement by the Company, prior to the final disposition of any Claim by final adjudication to which there are no further rights of appeal, of any and all Expenses actually and reasonably paid or incurred by Indemnitee in connection with any Claim arising out of an Indemnifiable Event. Indemnitee's right to such advancement is not subject to the satisfaction of any standard of conduct. Without limiting the generality or effect of the foregoing, within twenty (20) calendar days after any request by Indemnitee, the Company shall, in accordance with such request, (a) pay such Expenses on behalf of Indemnitee, (b) advance to Indemnitee funds in an amount sufficient to pay such Expenses, or (c) reimburse Indemnitee for such Expenses. In connection with any request for Expense Advances, Indemnitee shall not be required to provide any documentation or information to the extent that the provision thereof would undermine or otherwise jeopardize attorney-client privilege. Execution and delivery to the Company of this Agreement by Indemnitee constitutes an undertaking by the Indemnitee, and Indemnitee hereby agrees, to repay any amounts paid, advanced or reimbursed by the Company pursuant to this Section 4 in respect of Expenses relating to, arising out of or resulting from any Claim in respect of which it shall be determined, pursuant to Section 10, following the final disposition of such Claim, that Indemnitee is not entitled to indemnification hereunder. No other form of undertaking shall be required other than the execution of this Agreement. Indemnitee's obligation to reimburse the Company for Expense Advances shall be unsecured and no interest shall be charged thereon.

5. **Indemnification for Expenses in Enforcing Rights.** To the fullest extent allowable under applicable law, the Company shall also indemnify against, and, if requested by Indemnitee, shall advance to Indemnitee subject to and in accordance with Section 4, any Expenses actually and reasonably paid or incurred by Indemnitee in connection with any action or proceeding by Indemnitee for (a) indemnification or reimbursement or advance payment of Expenses by the Company under any provision of this Agreement, or under any other agreement or provision of the Constituent Documents now or hereafter in effect relating to Claims relating to Indemnifiable Events, and/or (b) recovery under any directors' and officers' liability insurance policies maintained by the Company. However, in the event that Indemnitee is ultimately determined not to be entitled to such indemnification or insurance recovery, as the case may be, then all amounts advanced under this Section 5 shall be repaid. Indemnitee shall be required to reimburse the Company in the event that a final judicial determination is made that such action brought by Indemnitee was frivolous or not made in good faith.

6. **Partial Indemnity.** If Indemnitee is entitled under any provision of this Agreement to indemnification by the Company for a portion of any Losses in respect of a Claim related to an Indemnifiable Event but not for the total amount thereof, the Company shall nevertheless indemnify Indemnitee for the portion thereof to which Indemnitee is entitled.

7. **Contribution in the Event of Joint Liability.** To the fullest extent permissible under applicable law, if the indemnification and hold harmless rights provided for in this Agreement are unavailable to Indemnitee in whole or in part for any reason whatsoever, the Company,

in lieu of indemnifying and holding harmless Indemnitee, shall pay, in the first instance, the entire amount incurred by Indemnitee, whether for judgments, liabilities, fines, penalties, amounts paid or to be paid in settlement and/or for Expenses, in connection with any Indemnifiable Event, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Indemnifiable Event in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such proceeding; and/or (ii) the relative fault of the Company (and its directors, officers, employees, trustees, fiduciaries and agents) and Indemnitee in connection with such event(s) and/or transaction(s).

8. Notification and Defense of Claims.

(a) Notification of Claims. Indemnitee shall notify the Company in writing as soon as practicable of any Claim which could relate to an Indemnifiable Event or for which Indemnitee could seek Expense Advances, including a brief description (based upon information then available to Indemnitee) of the nature of, and the facts underlying, such Claim. The failure by Indemnitee to timely notify the Company hereunder shall not relieve the Company from any liability hereunder other than to the extent the Company's ability to participate in the defense of such claim was materially and adversely prejudiced by such failure.

(b) Defense of Claims. The Company shall be entitled to participate in the defense of any Claim relating to an Indemnifiable Event at its own expense and, except as otherwise provided below, to the extent the Company so wishes, it may assume the defense thereof with counsel reasonably satisfactory to Indemnitee. After notice from the Company to Indemnitee of its election to assume the defense of any such Claim, the Company shall not be liable to Indemnitee under this Agreement or otherwise for any Expenses subsequently directly incurred by Indemnitee in connection with Indemnitee's defense of such Claim other than reasonable costs of investigation or as otherwise provided below. Indemnitee shall have the right to employ its own legal counsel in such Claim, but all Expenses related to such counsel incurred after notice from the Company of its assumption of the defense shall be at Indemnitee's own expense; provided, however, that if (i) Indemnitee's employment of its own legal counsel has been authorized by the Company, (ii) Indemnitee's counsel has reasonably determined that there may be a conflict of interest between Indemnitee and the Company in the defense of such Claim, (iii) after a Change in Control, Indemnitee's employment of its own counsel has been approved by the Independent Counsel or (iv) the Company shall not in fact have employed counsel to assume the defense of such Claim, then Indemnitee shall be entitled to retain its own separate counsel (but not more than one law firm plus, if applicable, local counsel in respect of any such Claim) and all Expenses related to such separate counsel shall be borne by the Company.

9. Procedure Upon Application for Indemnification. In order to obtain indemnification pursuant to this Agreement, Indemnitee shall submit to the Company a written request therefor, including in such request such documentation and information as is reasonably available to Indemnitee and is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Claim. Indemnification shall be made insofar as the Company determines Indemnitee is entitled to indemnification in accordance with Section 10 below.

10. Determination of Right to Indemnification.

(a) Mandatory Indemnification; Indemnification as a Witness.

(i) Mandatory Indemnification. To the extent that Indemnitee shall have been successful on the merits or otherwise in defense of any Claim relating to an Indemnifiable Event or any portion thereof or in defense of any issue or matter therein, including without limitation dismissal without prejudice or settlement of the Claim (subject to the terms of Section 12 below), Indemnitee shall be indemnified against all Losses relating to such Claim in accordance with Section 3 to the fullest extent allowable by law.

(ii) Indemnification as a Witness. To the extent that Indemnitee's involvement in a Claim relating to an Indemnifiable Event is to prepare to serve and serve as a witness, and not as a party, the Indemnitee shall be indemnified against all Losses incurred in connection therewith to the fullest extent allowable by law.

(b) Standard of Conduct. To the extent that the provisions of Section 10(a) are inapplicable to a Claim related to an Indemnifiable Event that shall have been finally disposed of, any determination of whether Indemnitee has satisfied any applicable standard of conduct under Delaware law that is a legally required condition to indemnification of Indemnitee hereunder against Losses relating to such Claim and any determination that Expense Advances must be repaid to the Company (a "**Standard of Conduct Determination**") shall be made as follows:

(i) if no Change in Control has occurred, (A) by a majority vote of the Disinterested Directors, even if less than a quorum of the Board, (B) by a committee of Disinterested Directors designated by a majority vote of the Disinterested Directors, even though less than a quorum or (C) if there are no such Disinterested Directors, by Independent Counsel in a written opinion addressed to the Board, a copy of which shall be delivered to Indemnitee; and

(ii) if a Change in Control shall have occurred, (A) if the Indemnitee so requests in writing, by a majority vote of the Disinterested Directors, even if less than a quorum of the Board or (B) otherwise, by Independent Counsel in a written opinion addressed to the Board, a copy of which shall be delivered to Indemnitee.

The Company shall indemnify and hold harmless Indemnitee against and, if requested by Indemnitee, shall reimburse Indemnitee for, or advance to Indemnitee, within twenty (20) calendar days of such request, any and all Expenses incurred by Indemnitee in cooperating with the Person or Persons making such Standard of Conduct Determination.

(c) Making the Standard of Conduct Determination. The Company shall use its reasonable best efforts to cause any Standard of Conduct Determination required under Section 10(b) to be made as promptly as practicable. If the Person or Persons designated to make the Standard of Conduct Determination under Section 10(b) shall not have made a determination within thirty (30) calendar days after the later of (A) receipt by the Company of a written request from Indemnitee for indemnification pursuant to Section 9 (the date of such receipt being the "**Notification Date**") and (B) the selection of an Independent Counsel, if such determination is to be made by Independent Counsel, then Indemnitee shall be deemed to have satisfied the applicable standard of conduct, absent (i) a misstatement by Indemnitee of a material fact, or an omission of a material fact necessary to make

Indemnitee's statement not materially misleading, in connection with the request for indemnification, or (ii) a final judicial determination that any or all such indemnification is expressly prohibited under applicable law; provided, however, that such thirty (30) calendar day period may be extended for a reasonable time, not to exceed an additional fifteen (15) calendar days, if the Person or Persons making such determination in good faith requires such additional time to obtain or evaluate information relating thereto. Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement of Indemnitee to indemnification under this Agreement shall be required to be made prior to the final disposition of any Claim.

(d) Payment of Indemnification. If, in regard to any Losses:

- (i) Indemnitee shall be entitled to indemnification pursuant to Section 10(a);
- (ii) no Standard of Conduct Determination is legally required as a condition to indemnification of Indemnitee hereunder; or
- (iii) Indemnitee has been determined or deemed pursuant to Section 10(b) or Section 10(c) to have satisfied the Standard of Conduct Determination,

then the Company shall pay to Indemnitee, within twenty (20) calendar days after the later of (A) the Notification Date or (B) the earliest date on which the applicable criterion specified in clause (i), (ii) or (iii) is satisfied, an amount equal to such Losses.

(e) Selection of Independent Counsel for Standard of Conduct Determination. If a Standard of Conduct Determination is to be made by Independent Counsel pursuant to Section 10(b)(i), the Independent Counsel shall be selected by the Board of Directors, and the Company shall give written notice to Indemnitee advising Indemnitee of the identity of the Independent Counsel so selected. If a Standard of Conduct Determination is to be made by the Independent Counsel pursuant to Section 10(b)(ii), the Independent Counsel shall be selected by Indemnitee, and Indemnitee shall give written notice to the Company advising it of the identity of the Independent Counsel so selected. In either case, Indemnitee or the Company, as applicable, may, within ten (10) calendar days after receiving written notice of selection from the other, deliver to the other a written objection to such selection; provided, however, that such objection may be asserted only on the ground that the Independent Counsel so selected does not satisfy the criteria set forth in the definition of "Independent Counsel" in Section 2, and the objection shall set forth with particularity the factual basis of such assertion. Absent a proper and timely objection, the individual or firm so selected shall act as Independent Counsel. If such written objection is properly and timely made and substantiated, (i) the Independent Counsel so selected may not serve as Independent Counsel unless and until such objection is withdrawn or a court has determined that such objection is without merit; and (ii) the non-objecting party may, at its option, select an alternative Independent Counsel and give written notice to the other party advising such other party of the identity of the alternative Independent Counsel so selected, in which case the provisions of the two immediately preceding sentences, the introductory clause of this sentence and numbered clause (i) of this sentence shall apply to such subsequent selection and notice. If applicable, the provisions of clause (ii) of the immediately preceding sentence shall apply to successive alternative selections. If no Independent Counsel that is permitted under the foregoing provisions of this Section 10(e) to make the Standard of Conduct Determination shall have been selected within twenty (20) calendar days after the Company gives its initial notice pursuant to the first sentence of this Section 10(e) or Indemnitee gives its initial notice pursuant to the second sentence of this Section 10(e), as the case may be, either the Company or Indemnitee may petition the Delaware Court to resolve any objection which shall have been made by the Company or Indemnitee to the other's selection of Independent Counsel and/or to appoint as

Independent Counsel an individual or firm to be selected by the Court or such other person as the Court shall designate, and the individual or firm with respect to whom all objections are so resolved or the individual or firm so appointed will act as Independent Counsel. In all events, the Company shall pay all of the reasonable fees and expenses of the Independent Counsel incurred in connection with the Independent Counsel's determination pursuant to Section 10(b) and shall fully indemnify and hold harmless such Independent Counsel against any and all expenses, claims, liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(f) Presumptions and Defenses.

(i) Indemnitee's Entitlement to Indemnification. In making any Standard of Conduct Determination, the Person or Persons making such determination shall presume that Indemnitee has satisfied the applicable standard of conduct and is entitled to indemnification, and the Company shall have the burden of proof to overcome that presumption and establish that Indemnitee is not so entitled. Any Standard of Conduct Determination that is adverse to Indemnitee may be challenged by the Indemnitee in the Delaware Court. No determination by the Company (including by its directors or any Independent Counsel) that Indemnitee has not satisfied any applicable standard of conduct or failure by the Company to reach such a determination may be used as a defense to any legal proceedings brought by Indemnitee to secure indemnification or reimbursement or advance payment of Expenses by the Company hereunder or create a presumption that Indemnitee has not met any applicable standard of conduct.

(ii) Reliance as a Safe Harbor. For purposes of this Agreement, and without creating any presumption as to a lack of good faith if the following circumstances do not exist, Indemnitee shall be deemed to have acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the Company if Indemnitee's actions or omissions to act are taken in good faith reliance upon the records of the Company, including its financial statements, or upon information, opinions, reports or statements furnished to Indemnitee by the officers or employees of the Company or any of its subsidiaries in the course of their duties, or by committees of the Board or by any other Person (including legal counsel, accountants and financial advisors) as to matters Indemnitee reasonably believes are within such other Person's professional or expert competence and who has been selected with reasonable care by or on behalf of the Company. In addition, the knowledge and/or actions, or failures to act, of any director, officer, agent or employee of the Company shall not be imputed to Indemnitee for purposes of determining the right to indemnity hereunder.

(iii) No Other Presumptions. For purposes of this Agreement, the termination of any Claim by judgment, order, settlement (whether with or without court approval) or conviction, or upon a plea of nolo contendere or its equivalent, will not create a presumption that Indemnitee did not meet any applicable standard of conduct or have any particular belief, or that indemnification hereunder is otherwise not permitted.

(iv) Defense to Indemnification and Burden of Proof. It shall be a defense to any action brought by Indemnitee against the Company to enforce this Agreement (other than an action brought to enforce a claim for Losses incurred in defending against a Claim related to an Indemnifiable Event in advance of its final disposition) that it is not permissible under applicable law for the Company to indemnify Indemnitee for the amount claimed. In connection with any such action or any related Standard of Conduct Determination, the burden of proving such a defense or that the Indemnitee did not satisfy the applicable standard of conduct shall be on the Company.

(v) Resolution of Claims. The Company acknowledges that a settlement or other disposition short of final judgment may be successful on the merits or otherwise for purposes of Section 10(a)(i) if it permits a party to avoid expense, delay, distraction, disruption and uncertainty. In the event that any Claim relating to an Indemnifiable Event to which Indemnitee is a party is resolved in any manner other than by adverse judgment against Indemnitee (including, without limitation, settlement of such action, claim or proceeding with or without payment of money or other consideration) it shall be presumed that Indemnitee has been successful on the merits or otherwise for purposes of Section 10(a)(i). The Company shall have the burden of proof to overcome this presumption.

11. Exclusions from Indemnification. Notwithstanding anything in this Agreement to the contrary, the Company shall not be obligated to:

(a) indemnify or advance funds to Indemnitee for Expenses or Losses with respect to proceedings initiated by Indemnitee, including any proceedings against the Company or its directors, officers, employees or other indemnitees and not by way of defense, except:

(i) proceedings referenced in Section 5 above (unless a court of competent jurisdiction determines that each of the material assertions made by Indemnitee in such proceeding was not made in good faith or was frivolous); or

(ii) where the Company has joined in or the Board has consented to the initiation of such proceedings.

(b) indemnify Indemnitee if a final decision by a court of competent jurisdiction determines that such indemnification is prohibited by applicable law.

(c) indemnify Indemnitee for the disgorgement of profits arising from the purchase or sale by Indemnitee of securities of the Company in violation of Section 16(b) of the Exchange Act, or any similar successor statute, state law or other law.

(d) indemnify or advance funds to Indemnitee for Indemnitee's reimbursement to the Company of any bonus or other incentive-based or equity-based compensation previously received by Indemnitee or payment of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Exchange Act (including any such reimbursements under Section 304 of the Sarbanes-Oxley Act of 2002 in connection with an accounting restatement of the Company or the payment to the Company of profits arising from the purchase or sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act).

12. Settlement of Claims. The Company shall not be liable to Indemnitee under this Agreement for any amounts paid in settlement of any threatened or pending Claim related to an Indemnifiable Event effected without the Company's prior written consent, which shall not be unreasonably withheld. The Company shall not settle any Claim related to an Indemnifiable Event in any manner that would impose any Losses on the Indemnitee without the Indemnitee's prior written consent. The Company shall not, without the prior written consent of Indemnitee, effect any settlement of any Claim relating to an Indemnifiable Event which the Indemnitee is or could have been a party unless such settlement solely involves the payment of money and includes a complete and unconditional release of the Indemnitee from all liability on all claims that are the subject matter of such Claim.

13. Duration. All agreements and obligations of the Company contained herein shall continue during the period that Indemnitee is a director, officer, employee or agent of the

Company or any subsidiary of the Company (or is serving at the request of the Company as a director, officer, employee, member, trustee or agent of another Enterprise) and shall continue thereafter (i) so long as Indemnitee may be subject to any possible Claim relating to an Indemnifiable Event (including any rights of appeal thereto) and (ii) throughout the pendency of any proceeding (including any rights of appeal thereto) commenced by Indemnitee to enforce or interpret his or her rights under this Agreement, even if, in either case, he or she may have ceased to serve in such capacity at the time of any such Claim or proceeding.

14. Non-Exclusivity. The rights of Indemnitee hereunder will be in addition to any other rights Indemnitee may have under the Constituent Documents, the law of the State of Delaware, any other contract or otherwise (collectively, “**Other Indemnity Provisions**”); provided, however, that (a) to the extent that Indemnitee otherwise would have any greater right to indemnification under any Other Indemnity Provision, Indemnitee will be deemed to have such greater right hereunder and (b) to the extent that any change is made to any Other Indemnity Provision which permits any greater right to indemnification than that provided under this Agreement as of the date hereof, Indemnitee will be deemed to have such greater right hereunder. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. Liability Insurance. For the duration of Indemnitee’s service as a director or officer of the Company, and thereafter for so long as Indemnitee shall be subject to any pending Claim relating to an Indemnifiable Event, the Company shall use commercially reasonable efforts (taking into account the scope and amount of coverage available relative to the cost thereof) to continue to maintain in effect policies of directors’ and officers’ liability insurance providing coverage that is at least substantially comparable in scope and amount to that provided by the Company’s current policies of directors’ and officers’ liability insurance. The insurance provided pursuant to this Section 15 shall be primary insurance to the Indemnitee for any Indemnifiable Event and/or Expense to which such insurance applies. In all policies of directors’ and officers’ liability insurance maintained by the Company, Indemnitee shall be named as an insured in such a manner as to provide Indemnitee the same rights and benefits as are provided to the most favorably insured of the Company’s directors, if Indemnitee is a director, or of the Company’s officers, if Indemnitee is an officer (and not a director) by such policy. Upon request, the Company will provide to Indemnitee copies of all directors’ and officers’ liability insurance applications, binders, policies, declarations, endorsements and other related materials.

16. No Duplication of Payments. The Company shall not be liable under this Agreement to make any payment to Indemnitee in respect of any Losses to the extent Indemnitee has otherwise received payment under any insurance policy, the Constituent Documents, Other Indemnity Provisions or otherwise of the amounts otherwise (including from another Enterprise) indemnifiable by the Company hereunder; provided that the foregoing shall not affect the rights of Indemnitee or the Fund Indemnitors (as defined below) as set forth in Section 17.

17. Primacy of Indemnification. The Company hereby acknowledges that Indemnitee has or may have in the future certain rights to indemnification, advancement of expenses and/or insurance provided by Investment Group of Santa Barbara and certain of its affiliates (collectively, the “**Fund Indemnitors**”). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and (iii) that it shall be liable for the full amount

of all Losses to the extent legally permitted and as required by the terms of this Agreement, the Constituent Documents and/or Other Indemnity Provisions, without regard to any rights Indemnitee may have against the Fund Indemnitors. The Company irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing, and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 17.

18. Subrogation. In the event of payment to Indemnitee under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee (other than against the Fund Indemnitors). Indemnitee shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

19. Amendments; Waivers. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing by both of the parties hereto. No waiver of any of the provisions of this Agreement shall be binding unless in the form of a writing signed by the party against whom enforcement of the waiver is sought, and no such waiver shall operate as a waiver of any other provisions hereof (whether or not similar), nor shall such waiver constitute a continuing waiver. Except as specifically provided herein, no failure to exercise or any delay in exercising any right or remedy hereunder shall constitute a waiver thereof.

20. Enforcement and Binding Effect.

(a) The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

(b) Without limiting any of the rights of Indemnitee under any Other Indemnity Provisions as they may be amended from time to time, this Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof.

(c) This Agreement shall be binding upon and inure to the benefit of and be enforceable by the parties hereto and their respective successors (including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business and/or assets of the Company), assigns, spouses, heirs and personal and legal representatives. The Company shall require and cause any successor (whether direct or indirect by purchase, merger, consolidation or otherwise) to all, substantially all or a substantial part of the business and/or assets of the Company, by written agreement in form and substance satisfactory to Indemnitee, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

21. Severability. The provisions of this Agreement shall be severable in the event that any of the provisions hereof (including any portion thereof) are held by a court of competent jurisdiction to be invalid, illegal, void or otherwise unenforceable, and the remaining provisions shall remain enforceable to the fullest extent permitted by law. Upon such determination that any term or other provision is invalid, illegal or unenforceable, the parties hereto shall negotiate in good faith to modify this Agreement so as to effect the original intent of the parties as closely as possible in a mutually acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the greatest extent possible.

22. Notices. All notices, requests, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given if delivered by hand, against receipt, or mailed, by postage prepaid, certified or registered mail:

- (a) if to Indemnitee, to the address set forth on the signature page hereto.
- (b) if to the Company, to:

AppFolio, Inc.
Attn: Matt Mazza, General Counsel
50 Castilian Drive
Goleta, California 93117

Notice of change of address shall be effective only when given in accordance with this Section. All notices complying with this Section shall be deemed to have been received on the date of hand delivery or on the third business day after mailing.

23. Governing Law and Forum. This Agreement shall be governed by and construed and enforced in accordance with the laws of the State of Delaware applicable to contracts made and to be performed in such state without giving effect to its principles of conflicts of laws. The Company and Indemnitee hereby irrevocably and unconditionally: (a) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court and not in any other state or federal court in the United States or any other country, (b) consent to submit to the exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement and (c) waive, and agree not to plead or make, any claim that the Delaware Court lacks venue or that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

24. Headings. The headings of the sections and paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction or interpretation thereof.

25. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original, but all of which together shall constitute one and the same Agreement.

[Remainder of Page Intentionally Left Blank; Signature Page Follows]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

COMPANY:

APPFOLIO, INC.

By: __

Name: __

Its: __

INDEMNITEE:

(Print Name)

Address: 50 Castilian Drive

Goleta, CA 93117

[Signature Page to Indemnification Agreement]

List of Subsidiaries of the Registrant

<u>Subsidiary</u>	<u>Jurisdiction</u>
AppFolio Utility Management, Inc.	California
AppFolio Investment Management, Inc.	California
Dynasty Marketplace, Inc.	Delaware
Mesa Insurance Solutions, Inc.	California
MyCase, Inc.	California
RentLinx LLC	Michigan
Terra Mar Insurance Company, Inc.	Hawaii

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-229970, No.333-223231, No. 333-216274, No. 333-209792, and No. 333-206179) of AppFolio, Inc. of our report dated March 2, 2020 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP
Los Angeles, California
March 2, 2020

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

I, Jason Randall, certify that:

1. I have reviewed this Annual Report on Form 10-K of AppFolio, Inc.;
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 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 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: March 2, 2020

/s/ Jason Randall

Jason Randall
Chief Executive Officer

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

I, Ida Kane, certify that:

1. I have reviewed this Annual Report on Form 10-K of AppFolio, Inc.;
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 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 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: March 2, 2020

/s/ Ida Kane

Ida Kane
Chief Financial Officer

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

The following certifications are hereby made in connection with the Annual Report on Form 10-K of AppFolio, Inc. (the "Company") for the period ended December 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"):

I, Jason Randall, President and Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented.

Date: March 2, 2020

By: /s/ Jason Randall

Jason Randall
President and Chief Executive Officer

I, Ida Kane, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge, (i) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and (ii) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented.

Date: March 2, 2020

By: /s/ Ida Kane

Ida Kane
Chief Financial Officer