SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

(Mark One)

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

For the annual period ended January 31, 2020

OR

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

For transition period from to .

Commission File Number 001-38553.

DOMO, INC.
(Exact Name of Registrant as Specified in its Charter)

Delaware **(State or Other Jurisdiction of Incorporation or Organization)**	**27-3687433** **(I.R.S. Employer Identification Number)**

772 East Utah Valley Drive
American Fork, UT 84003
(Address of principal executive office, including zip code)

(801) 899-1000

(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class B Common Stock, par value $0.001 per share	DOMO	The Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the 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 be 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.

Large accelerated filer	o	Accelerated filer	☒
Non-accelerated filer	o	Smaller reporting company	o
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

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

As of July 31, 2019, the aggregate market value of the registrant’s common equity held by non-affiliates was approximately $664.3 million. Shares of common stock held by each executive officer and director and by each other person who may be deemed to be an affiliate of the registrant have been excluded from this computation. This determination of affiliate status for this purpose is not necessarily a conclusive determination for other purposes.

As of March 31, 2020, there were approximately 3,263,659 shares of the registrant's Class A common stock and 25,079,606 shares of the registrant's Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant’s definitive proxy statement relating to its 2020 annual meeting of stockholders, or the 2020 Proxy Statement, are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. The 2020 Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

Domo, Inc.

Form 10-K

For the Fiscal Year Ended January 31, 2020

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

As used in this Annual Report on Form 10-K, unless expressly indicated or the context otherwise requires, references to “Domo,” “we,” “us,” “our,” “the Company,” and similar references refer to Domo, Inc. and its consolidated subsidiaries.

This Annual Report on Form 10-K, including the sections titled “Business” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements containing words such as “may,” “believe,” “anticipate,” “expect,” “intend,” “plan,” “project,” “projections,” “business outlook,” “estimate,” or similar expressions constitute forward-looking statements. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. They include, but are not limited to, statements about:

- our ability to attract new customers and retain and expand our relationships with existing customers;
- our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit, operating expenses, key metrics, ability to generate cash flow and ability to achieve and maintain future profitability;
- the anticipated trends, market opportunity, growth rates and challenges in our business and in the business intelligence software market;
- the efficacy of our sales and marketing efforts;
- our ability to compete successfully in competitive markets;
- our ability to respond to and capitalize on rapid technological changes;
- our expectations and management of future growth;
- our ability to enter new markets and manage our expansion efforts, particularly internationally;
- our ability to develop new product features;
- our ability to attract and retain key employees and qualified technical and sales personnel;
- our ability to effectively and efficiently protect our brand;
- our ability to timely scale and adapt our infrastructure;
- our ability to protect our customers' data and proprietary information;
- the effect of general economic and market conditions on our business;
- the impact of the coronavirus outbreak, including on the global economy, our results of operations, enterprise software spending, and business continuity;
- our ability to maintain, protect, and enhance our intellectual property and not infringe upon others’ intellectual property; and
- our ability to comply with all governmental laws, regulations and other legal obligations.

Our actual results may differ materially from those contained in or implied by any forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, including those factors discussed in Part I, Item 1A (Risk Factors).

In light of the significant uncertainties and risks inherent in these forward-looking statements, you should not regard these statements as a representation or warranty by us or anyone else that we will achieve our objectives and plans in any specified time frame, or at all, or as predictions of future events. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

PART I

Item 1. Business

Overview

At Domo, we believe people and data are an organization's most valuable assets in the cloud era. Our Business Cloud is a software platform that enables processes that are critically dependent on business intelligence data – which historically could take weeks, months or longer – to be done on-the-fly, in as fast as minutes or seconds, at scale. From marketing to operations, HR to finance, IT to product development, supply chain to sales, Domo's Business Cloud is designed to change the way organizations are managed and empower our customers to go fast, go big and go bold.

Through Domo's Business Cloud, data from across the business is collected, stored, prepared, organized, analyzed, visualized, and shared. Algorithms and machine learning can be applied to the data that allow alerts to be triggered and actions invited. Users can receive these notifications on any device and immediately act on the invitation, after which the system can write back to the original system of record. Because Domo can digitally connect any organization and empower each of its employees, we believe our market potential is every working person with a mobile device. Because we leverage the power of the cloud, our platform can process extremely large volumes of quantitative and qualitative data while maintaining high performance levels. On a typical business day, our customers in the aggregate typically query several hundred trillion rows from uncached queries. Even with this volume of data, we maintain a subsecond average query response time. In aggregate, the data in Domo can be indexed anonymously.

We have made significant investments to build an enterprise-grade platform with the scale, speed and security to support the world's largest organizations, regardless of where they are in their digital transformation journey. In many ways, building Domo was like building seven start-ups in one to solve gaps in data strategy, which include the typical functions of connecting and transforming data, visualizing and analyzing it, and building apps and extending that data to teams, entire organizations, partners and customers. That's why Domo is more than just a business intelligence , data warehouse, data discovery, analytics, collaboration, dashboarding, visualization or reporting tool. These tools and technologies are typically provided by separate vendors today. Domo combines all of them in a single platform that can augment a customer's existing infrastructure with the following:

- ***Connectors*****:** Domo offers more than 1,000 powerful, first-class connectors which we define as read/write, API and standards based connectors that are available in the Domo Appstore, as well as a library of very flexible universal connectors that currently power over 100,000 Domo datasets, enabling all users, regardless of technical ability, to connect to data across a broad range of sources and facilitate initiation of business processes. These connectors enable data to be continuously synchronized in real time, fostering visibility and interoperability across a broad range of data sources.
- ***Data Warehouse*****:** Our data warehouse, Adrenaline, stores massive amounts of data from across the business, organizes that data across many factors or variables and employs a massive number of processors to query that data in parallel, enabling employees across the organization to simultaneously access the same data for their various needs with subsecond response times on average.
- ***Domo ETL*****:** Fusion is our data transformation engine that sorts customer data, making it possible for any dataset connected to Domo to be cleansed, combined and prepared for use leveraging Magic ETL, Data Flows and hygiene algorithms.
- ***Data Analysis and Visualization*****:** Our Explorer analytics suite allows users to analyze, display, share and interact with data through pixel-perfect visualizations. Explorer is a data discovery tool that seamlessly works on mobile as well as on wall monitors in executive offices or manufacturing facility floors.
- ***Collaboration*****:** Buzz is our standalone collaboration and productivity suite that integrates seamlessly with Domo's other features. Chat, sharing, organizational charts, profiles, and project management all help foster an engaged and curious workforce, so that anyone in an organization can participate in improving the business.
- ***Artificial Intelligence Algorithms*****:** Domo's Mr. Roboto leverages machine learning algorithms, predictive analytics, and other artificial intelligence technologies to create alerts, detect anomalies, optimize queries, and suggest areas of interest to help people focus on what matters most. Mr. Roboto constantly scans incoming data to identify trends, anomalies and correlations, providing alerts and initiating business processes.

- ***Partner Ecosystem*:** With the Domo Appstore, APIs and developer tool kits, Domo enables an ecosystem of partners to quickly build applications on the platform. We believe this will be a meaningful source of future lead generation as application creation investment thresholds are high.

As of January 31, 2020, we had more than 1,800 organizations as customers. We focus our sales and marketing resources on obtaining customers with over $100 million in revenue. For the years ended January 31, 2018, 2019 and 2020, our enterprise customers, which we define as customers with over $1 billion in revenue, accounted for 46%, 45% and 47% of our revenue for such periods, respectively. We employ a land-and-expand business model and typically enter into enterprises within a specific division or for a specific use case. As our users see the value of our platform and user engagement increases, we expand our footprint within their organization. Our subscription net revenue retention rate, which compares the subscription revenue generated from a cohort of customers that generated subscription revenue at the beginning of the same period in consecutive fiscal years (excluding customers from the cohort who canceled during the initial period), has averaged over 100% for the years ended January 31, 2018, 2019 and 2020.

For the years ended January 31, 2018, 2019 and 2020, we had total revenue of $108.5 million, $142.5 million and $173.4 million, respectively, representing year-over-year growth of 31% and 22%, respectively. For the years ended January 31, 2018, 2019 and 2020, our net loss was $176.6 million, $154.3 million and $125.7 million, respectively.

The Domo Solution

We believe business technology must be as easy-to-use and intuitive as mobile consumer applications, while providing enterprise-grade scalability and security features. Everyone, from a CEO to a front-line employee, benefits from the functionality that Domo provides. Our Business Cloud platform fosters collaboration, efficient decision making, increased organizational productivity, and generates improved business results. The platform also is designed to help IT leaders deliver value rapidly to the business by seamlessly complementing their existing systems and infrastructure and unlocking value from their fragmented data and systems. While developing our platform, we have been focused on four key pillars.

All of Your People

Our platform enables every type of employee to connect to, analyze, and leverage data from their smartphone. When everyone can use data, the value of the data increases significantly and everyone is equipped with a common set of facts across all levels of an organization. As a result, data-driven knowledge proliferates throughout an organization as more employees become capable of contributing to shared, collaborative analysis. When freed from the constraints of traditional business intelligence tools, these employees tend to not only become increasingly productive, but also feel more connected to the broader organization.

All of Your Data in Real Time

Our platform provides real-time access to quantitative and qualitative data, including through more than 1,000 powerful first-class connectors as well as a library of very flexible universal connectors. In addition, through Domo Workbench, organizations can connect to proprietary data sources regardless of where those data sources reside within an organization. This comprehensive approach enables every type of employee to design customized, real-time views of data and data trends. For example, a marketer can design a visualization that includes real-time data of the click-through rates of the online advertisements, the impact of regional marketing campaigns, and the benchmarks of his organization's campaigns across the years.

Intelligence that Invites Actions

Our platform leverages artificial intelligence, including machine learning algorithms and predictive analytics, to continuously power more advanced insights, recommendations and alerts. We thereby enable employees to be aware of what is happening on a real-time basis, and take appropriate action where necessary. As more organizations and users adopt our platform, we have access to more data, and our indices become more powerful, resulting in more effective benchmarking. Our platform, based on ongoing variance analysis, is capable of providing personalized, proactive alerts and recommended actions to every employee and writing back to source applications based on predetermined actions triggered after certain thresholds or behavior has occurred. In the case of a bakery, for example, our platform can alert the owner that she does not have enough flour to meet tomorrow’s demand and recommend a supply schedule to prevent future stock-outs.

Domo Apps and Appstore

We have prebuilt applications for specific use cases, and our users, including development partners, can build on and extend Domo’s open cloud platform to create custom solutions for unique business needs, with limited training and no or limited IT involvement required. These applications range from a real-time social index to evaluate an organization's engagement across various social media platforms to a predictive analytics toolkit that allows users to analyze "what if" scenarios and forecast the direction of key business metrics to an aggregator for an organization's relevant mobile application statistics. To date, these applications have been adopted across a broad range of industries. Additionally, through the Domo Appstore, users have the option to make their applications available to all Domo users. This application ecosystem generates a powerful network for our platform — as users build, adopt and use additional applications, usage increases within an organization, which enables our platform to deliver even more powerful insights to those users.

Through the power of Domo's comprehensive cloud-based platform, organizations can finally provide all of their data, to all of their employees, all of the time.

Key Benefits of Our Solution

Domo is more than just a business intelligence, data connection, data warehouse, data transformation or ETL, data discovery, analytics, collaboration, dashboarding, visualization or reporting tool. These tools and technologies are typically provided by separate vendors today. Domo's Business Cloud brings all of them together to help companies leverage their business intelligence across various processes, at scale, in as fast as minutes or seconds.

The Domo platform delivers six core benefits, and from the combination of these six, customers benefit from a seventh; a virtuous cycle of optimization.

Executive and Outcome Focused Mobile Solution

From the beginning, we targeted CEOs as key users of our platform. That concept has fundamentally influenced every aspect of the Domo platform from architecture to user experience. CEOs have huge demands on their time, are constantly on the move, do not have time or desire to learn complex software, need answers that quickly drive decisions, need to create alignment within their organization, need to focus on the exceptional items that should bubble up in their business instead of turning over every stone to see if something is off, and hunger for as much collaborative and correlative signal as they can get. Our platform was designed to meet each of these needs.

Our native mobile application enables all employees, not just CEOs, to effectively manage their businesses and responsibilities using any device. Employees can see current status of business operations and receive automatic alerts for when they need to take action, delivered directly to their smartphone. Anyone can edit and interact with data and share it with colleagues in real time directly from their smartphone. While Domo was designed with mobile users first in mind, it is automatically accessible across laptops, TV screens, monitors, tablets and smartphones, via different browsers and visualization engines, which is a competitive differentiator.

Universal Data Model — Data Platform and Transformation

Domo is changing the way people think about data. Data is no longer a currency only to be banked, but is the fuel that drives the business. Domo puts data to work, all of the data, together in an integrated, robust system, for all of the business's employees. To accomplish this, Domo created a distributed data platform that was engineered to ingest, process, clean, prepare and make queryable all of a business's available data, and serve it back with a subsecond average query response time, not just from a couple of databases or a single warehouse, or a few external cloud apps, but from all of the data, including systems that come online outside of IT's influence like the myriad of cloud software providers each department might be leveraging. We believe that all of a business's quantitative and qualitative data must be brought together, in one system, in order to deliver the types of encompassing views and timely insights today's leaders must have. Our portfolio of connectors and cloud-based data warehouse provides a massively scalable solution to enable businesses to connect to their data systems. Our cloud-based ETL suite allows all of that data to be transformed and prepared together in a universal data format, enabling users to easily incorporate, change or discontinue different data sources without disruption. Our fast query engine searches the data, enabling insights to be generated. Now business leaders can have fully comprehensive views of what is happening, across all departments and across all systems.

Digitally Connected Organization — Interconnecting and Orchestrating across Disparate Systems

Businesses use many separate software systems to facilitate core elements of managing their business. This means there is no natural opportunity to leverage a broader, more holistic view of the state of the business or to take broadly informed actions and decision paths. It is very difficult to create alignment across the disparate organizations that use the siloed systems. This often creates walled gardens of data inside the business and blocks departments and teams from being able to effectively work full life cycle problems with each other. It also cripples the C-suite from being able to truly understand the nature of a problem or opportunity. Our comprehensive, cloud-based platform weaves seven critical platform components together to exploit this opportunity to increase alignment, accuracy and effectiveness of business leaders: data connections, data warehouse, data management, data analysis and visualization, artificial intelligence algorithms, and our partner ecosystem. An action in one system can have its influence measured in another, combined together in the same view, such as when marketing automation affects sales revenue generation, which in turn affects financial performance, to truly understand how best to guide the business.

Productivity — Fosters Getting Work Done Together

Our platform enables all employees to engage with each other with real-time data and business results at the center of the conversation. Employees can easily find others in their organization who access similar data and invite them and others with the appropriate permissions to engage in richer conversations to achieve business results. With Domo, users collaborate where the data lives, increasing everyone's productivity and ability to act on the data. Our platform also enables organizations to share their data and collaborate with customers, suppliers and other partners outside of the organization. Additionally, any user can schedule critical insights to be delivered to the right inboxes, ensuring the right stakeholders are being kept up-to-date on relevant developments.

Enterprise Security, Scalability and Compliance

We have invested significantly to build security features in our platform that have enabled us to expand our presence within the enterprise. Because we connect directly to data sources that hold companies' CRM, HCM, ERP and other sensitive data in our system, we must maintain enterprise-grade security standards for data access, privacy and administration. Our security protocols enabled us to attract enterprise customers across a wide array of industries, including many in highly regulated industries such as financial services and healthcare. Our security features, such as customer-controlled encryption key management, provide much needed confidence that the data on our platform is secure.

Our native multi-tenant, web-scale, massive parallel processing capabilities and multi-dimensional architecture manage extremely large volumes of data and deliver real-time analysis at scale. On a typical business day, our customers in the aggregate typically query several hundred trillion rows from uncached queries. Even with this volume of data, we maintain a subsecond average query response time. We leverage an organization's existing data systems, meaning IT does not have to re-architect what has already been built and does not have to invest in new infrastructure to implement our platform.

We also provide IT departments with centralized governance and administration capabilities. Our platform enables IT departments to not only monitor the health of all data within an organization, but also actively control who has access to that data on a real-time, continuous basis. Our platform provides robust controls down to row level security that enable leaders to tailor data access based on a variety of categories, including role, geography or department. We provide the assurance of leading security and compliance certifications, including those relating to SOC 1, SOC 2 + HITRUST, HIPAA and more.

Benchmarks and Applications — Ecosystem

We built the Domo platform with the explicit goal that it be extended and leveraged by a rich ecosystem of partners, developers, business experts and entrepreneurs. Each of the core pieces of the Domo platform has been engineered from the ground up to be extensible and accessible through APIs and SDKs. We have also created the Domo Appstore, a marketplace for the distribution of additive capabilities and pre-built content from the Domo ecosystem, such as a new data connector, a best-practice dashboard, or a fully functioning custom solution, to extend their Domo experience. Third parties are able to rapidly develop rich applications that leverage the collective power of the Domo platform. Each of the core tenets of the platform are offered as services and functionality used to build the types of products that typically would be expensive and time-consuming to replicate.

Virtuous Cycle of Optimization

The combination of these six core benefits drives a seventh factor, a virtuous cycle of optimization. A digitally connected organization is able to leverage all of the data, people, systems, behaviors, automation, write-back, predictive analytics, machine learning, natural language processing and workflows to achieve its goals and improve the entire business. Customers get more value from their workforce, and get more value from their data. We believe this is only the beginning; the network effect of digitizing complex workflows, automating well known outcomes, suggesting courses of action, unlocking crowd wisdom effects within the business and anomaly detection across the entire organization will continue to improve as more of an organization's people, data and systems are connected to the Domo platform.

Competitive Strengths

Our key competitive strengths include:

- ***Mobile Functionality.*** We designed Domo with mobile functionality front of mind. Domo's native mobile applications unlock users' ability to access data and collaborate in real time, from anywhere. When data is in Domo, it is immediately available for consumption on smartphones and other mobile devices without requiring separate versions or visualizations.

- ***Functionality That Can Be Used by Everyone.*** Employees can easily connect to relevant data sources, create powerful data transformations, analyze data, build reports and applications, configure alerts, and collaborate through our desktop or mobile application. Employees without technical expertise can use all of the features of our platform without involving a business analyst.

- ***Easy to Adopt.*** Employees can begin using our platform within minutes, without the need for heavy IT involvement to procure and implement. We offer a free trial, through our website, in addition to traditional inside and field sales models for broad company deployments.

- ***Scale***. Domo has been natively built on a cloud-based architecture that is capable of massive scale. The Domo data warehouse and our connector strategy allows our platform to connect, house and make accessible all of the data within an organization and have a system that can make recommendations.

- ***Proven Economic Value.*** The comprehensive capabilities of our solution enable organizations to benefit from cost savings that result from their ability to remove previously deployed, limited systems. Also, because our solution enables employees to spend less time tracking down data or preparing presentations for meetings, employees are able to dedicate more time to value added activities. As a result, in addition to cost savings, organizations that deploy our solution are often able to generate incremental revenue.

- ***Proven Enterprise Readiness.*** We have invested significantly to broaden our platform capabilities and enhance security and scalability requirements for the enterprise. We are investing in our field sales team to further increase our focus on attracting new enterprise customers and expanding our footprint within our current enterprise customers.

- ***Continuous Product Innovation.*** From inception through January 31, 2020, we have invested $464.2 million in research and development to create our comprehensive platform. These investments allowed us to create more than 1,000 first-class connectors as well as a library of very flexible universal connectors, which enable everyone to connect and use all of the data within their organization in real time, through our data explorer and ETL engine. We invested in creating our native mobile application, which empowers all employees to effectively manage their responsibilities using their mobile device. We also invested in developing collaboration capabilities, resulting in our solution being able to aggregate all collaboration activity within an organization in a context-sensitive, easily navigable view. These investments have also enabled us to build a comprehensive cloud-based platform with enterprise-grade features. More recently, these investments have allowed us to develop machine learning algorithms that invite all employees to action, based on the real-time data that is accessible within our platform. We developed the Domo Appstore on top of that, which offers hundreds of applications, developed internally and by an open ecosystem of partners, providing expertise across a variety of industries. Developer tools and programmatic APIs enable the rapid development and delivery of custom apps leveraging the Domo platform and services. Additionally, we believe that our significant investments in research and development will provide tremendous leverage in our financial model as our business continues to scale.

- ***Strong Industry Recognition.*** Our brand is synonymous with the next generation of cloud-native, mobile-first data solutions. We have attracted and retained top talent in our industry and have become a top choice for organizations looking for better ways to use data to run their businesses. We have received multiple innovation awards and top-ranked recognition for ease-of-use and business value based on customer-based research from organizations such as Dresner Advisory Services, Gartner Research and Ventana Research. In addition, Domo won the Best in Mobile Cloud Solution in the 2019-2020 Cloud Awards and the 2020 DEVIES Award for Best Innovation in IoT. We've also been recognized with workplace and growth awards including the Deloitte Technology Fast 500, Great Places to Work, Utah Business Best Places to Work (eight consecutive years) as well and Glassdoor Best Places to Work 2016. Additionally, our annual conference, Domopalooza, attracts thousands of prospects and users.

- ***Expanding Third Party Ecosystem with Strong Network Effects.*** We have developed pre-built applications for specific use cases and provide everyone with the necessary tools to build applications that run on our platform. These applications can be tailored to the specific needs of a specific role, organization or industry and leverage all the benefits of our solution to enable everyone to improve decision making, business outcomes and financial results. Once built, users can share these applications within their organization, but can also elect to open the application to all our users, across industries and geographies.

Growth Strategies

Key components of our growth strategy include:

- ***Increasing Our Overall Customer Base.*** The market for our platform is large and underpenetrated, as any organization of any size and in any industry is a potential customer of Domo. We believe there is substantial opportunity to add additional customers both in the United States and internationally as the need for all employees to access actionable, real-time data continues to drive market adoption of our platform. We are committed to further penetrating international markets such as Japan, Asia Pacific and EMEA.

- ***Accelerate Expansion within Existing Customers.*** We employ a land-and-expand business model and typically enter into enterprises either within a specific division or for a specific use case. As our users see the value of our platform and user engagement increases, we expand our footprint within the enterprise. We are focused on helping our users quickly realize the value of our platform. We have substantial growth potential within our existing customer base. We will continue to focus on showcasing the value of our platform to expand our footprint within our existing customers.

- ***Extend Platform Functionality and Value Proposition.*** Our goal is to continue to enhance and broaden the capabilities of our platform to address our users' evolving needs. To that end, we plan to continue to invest in enhancing the ease of use and self-service capabilities, scalability, security and performance of our platform and expanding the IoT, artificial intelligence and data management functionality of our platform. We will also continue to invest in additional features and capabilities.

- ***Expand the Domo Ecosystem.*** The ecosystem for our platform includes customer influencers, which share valuable best practices for and serve as proof points for other customers, strategic partners, which efficiently expand our reach, and third-party developers that create customized applications tailored for specific customer use cases. We will continue to invest in establishing and strengthening these relationships to broaden this ecosystem.

- ***Leverage the Data.*** The Domo platform is uniquely positioned to generate performance benchmarks and indices across a wide array of organizations and disciplines, and in time we plan to capitalize on that position to attract additional customers and broaden and deepen our relationships with them. Although no customer will have access to the data of another, given that customers bring their data into the same cloud-based platform, we could enable performance comparisons based on index derived from similarly-situated organizations.

Our Technology

Our solution is comprised of seven core elements:

- connectors;
- data warehouse and fast query engine;
- Domo ETL;
- data analysis and visualization tools;
- collaboration tools;
- artificial intelligence algorithms; and
- apps and partner ecosystem.

These core elements were developed with two foundational considerations in mind:

- accessibility for all users, with a heavy emphasis on mobile-first functionality; and
- access, and applicability to business of all sizes, including those requiring enterprise-grade governance and security.

Connectors

The foundation of our technology is the ability to connect all of an organization's relevant business data and then combine, cleanse and transform that data into formats that can be easily visualized and analyzed.

Our platform provides real-time access to data through a broad and flexible set of connection options, including through more than 1,000 first-class connectors, which we define as read/write, API and standards-based connectors that are available in the Domo Appstore, as well as a library of very flexible universal connectors. We also provide users an intuitive web-based toolkit, Connector Dev Studio, which allows users to build their own connectors.

Our platform allows organizations to integrate directly with almost any source of data required to answer key business questions. Whether the necessary data is located in other third-party systems, on-premise data stores, or even local machines, Domo provides easy access across all platforms with no coding necessary in most cases. Since Domo has built and maintains a large library of connectors, organizations no longer need to directly deal with the confusing and constantly changing ecosystem. Typically, all that is necessary are the security credentials required to access the data. Additionally, the cloud-based nature of Domo means that not only is it simple for an organization to import data, but such data will also be continually imported and updated creating a "living," real-time dataset with no hardware investment by the customer. For organizations with on-premises data solutions, or bespoke or legacy applications, we have developed Workbench, our secure data acquisition tool designed to easily and securely connect on-premises data to our platform. We thereby enable organizations to connect to real-time proprietary data sources regardless of where those data sources sit within the organization. QuickStart Apps help users load relevant data into a usable format with the click of a button. With a growing library of popular data sources that draw from years of role and industry experience, Domo guides users on what KPIs they should be measuring from the day they connect.

Data Warehouse and Fast Query Engine

Adrenaline, the Domo data warehouse, stores massive amounts of data connected from across the business, enabling anyone to quickly access the data they need.

After data has been imported into Domo, it is important that it is safe, secure, and available. Adrenaline uses industry-leading technologies to ensure that customer data is secure and encrypted while stored in the system. It is also stored in redundant systems to provide a safe and reliable retrieval. In the case of frequently changing, or updated data, Domo additionally stores historical versions of past data available for catastrophic recovery.

Availability of the data is handled through Domo's fast query layer. All data is prepared and available for querying through this feature. Adrenaline organizes the data across any number of factors or variables and employs a massive number of processors to query that data in parallel. This service supports queries while building simple cards as well as complex, custom queries and dataset joins on datasets comprised of billions of records. Our fast query layer eliminates the need for IT to perform time-consuming data summarizations or other complex processes in order to maintain high query performance. On top of the flexibility, it provides subsecond average query response time, enabling real-time consumption of information. The speed and flexibility at this layer differentiate between Domo from traditional solutions offered by our competitors.

Domo ETL: Data Transformation

Our self-service ETL toolset, Fusion, enables users to easily join, aggregate and cleanse data from multiple sources. Unlike some solutions that require separate tools to extract, transform and load, or ETL, data, Fusion permits users of all skill levels to clean and combine data within our platform.

With an intuitive, drag-and-drop interface, users with little or no expertise can easily combine all their data and transform it into a format that can be easily manipulated, visualized and analyzed. For data analysts, our platform includes SQL-based dataflows, which allow more technical users to combine and transform raw data sources for other users. Fusion also includes a variety of machine learning algorithm and predictive analytics tools to allow everyone to add intelligence to any dataset, enabling a range of data science analysis, including:

- cluster analysis to perform cohort analysis and discover relationships to understand complex data;
- predictive models built on a suite of regression algorithms to better understand core drivers and influencers of key business metrics;
- forecasting models using common forecasting methods;

- time-series, multivariate, parametric and non-parametric algorithms to reveal abnormal or “interesting” data in any dataset; and
- intelligent models built on machine learning algorithms.

All algorithms can be implemented using a simple wizard for configuration.

Real-time Analysis and Visualization

Our Explorer analytics suite, consisting of Domo Analyzer, Domo Pages and Collections, Domo Stories, Publication Groups and Domo Everywhere, allows users to analyze, display, share and interact with data through pixel-perfect visualizations.

Domo Analyzer allows users to analyze, display, share and interact with data across mobile devices and personal computers. Domo Analyzer combines an intuitive simplicity that allows business users to find quick insights and advanced capabilities analysts expect. Analyzer allows users to create their own workspace:

- over 300 chart types and a robust mapping engine that enable users to immediately visualize area-specific data, even suggesting charts based on the data input so users never start with a blank slate;
- the ability to see and manipulate the data in all columns that are applied to charts, along with any other unused columns that should be shown;
- out-of-the-box visualizations that make it easy to review numerous time periods to see trends and comparisons;
- pre-defined filters for any visualization, making it easy for viewers to explore the data and see results in specific areas;
- the ability to change options, colors, series, and even chart types on the fly and get instant feedback; and
- tools to allow users to verify that data is flowing correctly and on time.

Domo Pages and Collections allow everyone to consume and organize data in ways that are meaningful and personalized to them. It’s easy to drag-and-drop, re-size and group reports, which we refer to as cards, into collections, and build slideshows to share both internally or externally.

Domo Stories allows users to combine cards, text, and images in a dashboard to tell a powerful story about the data. Rather than simply arranging cards on a page, users can customize page layouts to emphasize certain points and guide other users through analysis of the data.

Other sharing tools include Publication Groups, which enable everyone to securely share filtered views of data with other individuals and groups, send a single card or a slideshow of cards through scheduled emails, enabling everyone to share valuable information with teams or external stakeholders.

Domo Everywhere is a set of embedded analytics tools that enable organizations to securely share data with customers, partners and vendors, without having to recreate new or special datasets. Content can be shared in portals, or web properties or even inside applications. Once embedded, any parameters applied to a card can be reflected in the embedded report. In addition, user access can be controlled by using Single Sign On and personal data permissions, or PDPs, to pass parameters back to Domo.

Real-time Collaboration

Domo connects all employees across an organization, while also allowing everyone to customize and create personalized experiences to help them learn and invite action on those items that are uniquely important to them.

Our Org Explorer and Profiles features bring a social component and transparency to an organization, allowing all employees to see other employees’ role within the organization, find their contact information and learn how they contribute to the organization. Everyone can see what cards their coworkers are following, and then follow the same information, or share their own data with them proactively.

Once connected with the right people, Buzz aggregates all collaboration activity, in a single context-sensitive, easily navigable view. This allows an entire organization to share and discuss data in real time, to make better decisions more quickly. With Buzz, users can:

- chat with individuals and teams around real-time data through both public and private channels and direct messages;

- share alerts with other users; and
- search for and share attachments with an easy-to-use drag-and-drop interface.

Other features to promote collaboration are included throughout our platform, including:

- Report Scheduler, which allows users to schedule delivery of a card or page to anyone;
- Snapshot Annotation, which allows users to call out a specific spike or trends in data, annotate on any card to highlight it for others and initiate a conversation from any device;
- Projects and Tasks, which help users quickly take action with simple planning and assignment tools, including creating a task directly from a Buzz thread; and
- Alerts, which prompt timely collaboration and action.

Artificial Intelligence Algorithms

Through Mr. Roboto, which leverages machine learning algorithms, artificial intelligence and predictive analytics, Domo creates alerts, detects anomalies, optimizes queries, and suggests areas of interest to help people focus on what matters most. We are also developing additional artificial intelligence capabilities to enable users to develop benchmarks and indexes based on data in the Domo platform, as well as automatic write back to other systems.

Domo was designed and built from the ground up to deliberately and seamlessly combine all the traditional disparate technologies into a single system. This seamless combination allows our customers to apply advanced analytics and machine learning to their data for a variety of uses, including:

- modeling access patterns to allow for intelligent alerts that inform users of what is happening with both their data and their organization — even if the user didn't explicitly ask for it; and
- analyzing popular consumption paths to allow for customized recommendations for data, reports, and even conversations that users may find interesting or may have missed.

Partner Ecosystem: App Development Platform and Appstore

The Domo Appstore offers hundreds of apps, developed internally and by an open ecosystem of partners, providing expertise across a variety of industries. Developer tools and programmatic APIs enable the rapid development and delivery of custom apps leveraging the Domo platform and services.

Domo's developer portal provides all of the tools and documentation needed to build custom apps leveraging our platform. Our App Design Studio lets non-technical users harness the power of Adobe Illustrator to build real-time infographics, and our App Dev Studio allows users to gain ultimate flexibility and develop customer visualizations using HTML, CSS, JavaScript, and just about any web technology.

Underlying our technology approach are two key considerations:

- accessibility for all users, which includes a heavy emphasis on mobile; and
- applicability to business of all sizes, requiring enterprise-grade governance.

Mobile-First Functionality

Domo's native mobile applications for iOS and Android, and also mobile web browsers, enable employees to effectively manage their responsibilities using their mobile device. Domo Mobile unlocks the ability for users to access their data and collaborate with their teams in real time, from anywhere.

- *Build Once and Done*. When data is loaded or content created in Domo, it is immediately available for consumption on mobile devices, tablets, and more. There is no need to maintain separate mobile versions of visualizations.
- *Powerful Visualization Exploration*. Domo's powerful page filters tool is also available on mobile. Whether it's an executive walking into a retail store or a manufacturing manager looking at a specific product line, individuals can quickly filter a page to find the story they are interested in.

- *Collaborate on the Go*. Just because users are out of the office doesn't mean they can't collaborate with their team around business. All the benefits of Buzz, Domo's powerful chat and collaboration platform, are available on any mobile device.
- *Share Key Metrics Internally and Externally*. Data owners can share important information with internal or external collaborators while limiting their access to sensitive or irrelevant data. Snapshot Annotations also help you make visuals clearer to your audience on mobile devices.
- *Browse Your Organization*. As a platform for business management, understanding organizational structure is key. With Domo, an organization's contact list and organizational chart are on any mobile device, for access to the people in the organization from anywhere, anytime.

Data Management, Governance, Security and Access Control

Domo's Business Cloud is designed to meet the enterprise security, compliance and privacy requirements of our customers, particularly in highly regulated industries, such as financial services, government, health care, pharmaceuticals, energy and technology.

In addition to advanced internal security controls, Domo provides extensive self-service features that enable administrators to stay in control of and have full transparency into data at all times. These features include access management, data governance and logging and monitoring tools.

Access Management

Creating users and granting access rights in Domo is the first layer in maintaining information security. PDPs allow users to create robust entitlement policies that govern access to specific data, increasing data usage while simultaneously helping to ensure that sensitive or irrelevant information remains secure. Pre-defined security profile options are included to allow organizations to easily deploy our platform. Each profile contains clearly defined access privileges, which can be turned on or off by default, and privileges and roles can be fully tailored to align with an organization's unique policy.

Logging and Monitoring

Administrators can easily monitor global activity across Domo with our Activity Logs console. Authorized users can quickly access usage metrics like login attempts, card views, card creation and card edits. The console also provides the times those events took place and by which user. Admins can filter and sort this data, and export to an Excel spreadsheet or CSV file.

Data Governance

Once data is connected to Domo, the platform provides capabilities and tools to manage it across its lifecycle. The Domo Data Warehouse is a dynamic 3D management console that enables IT professionals to interact with and curate every data source in Domo. Administrators can see which data sources are updating, identify potential problems, understand existing data relationships, and gauge the size of each data source, all in one visually engaging platform.

Domo Bring Your Own Key, or BYOK, provides the ability to rotate encryption keys numerous times a day. Through this user-controlled encryption, organizations can revoke encryption keys at any time, nullifying all data in the Domo platform and preventing access to their sensitive customer data.

Customers

As of January 31, 2020, we had over 1,800 customers. We have customers in a wide variety of industries, geographies, with 75% of our revenue for the year ended January 31, 2020 derived from customers in the United States, and sizes, ranging from small organizations to large enterprises. We define a customer at the end of any particular quarter as an entity that generated revenue greater than $2,500 during that quarter. In situations where an organization has multiple subsidiaries or divisions, each entity that is invoiced at a separate billing address is treated as a separate customer. In cases where customers purchase through a reseller, each end customer is counted separately. For the fiscal years ended January 31, 2018, 2019 and 2020, no single customer represented more than 10% of our revenue, nor did any single organization when accounting for multiple subsidiaries or divisions which may have been invoiced separately.

We have invested in platform capabilities and online support resources that allow our customers to expand the use of our platform in a self-guided manner. Our professional services, customer support and customer success functions also support our sales force by helping customers to successfully deploy our platform and implement additional use cases. We work closely with our customers to drive increased engagement with our platform by identifying new use cases through our customer success teams, as well as in-platform, self-guided experiences. We actively engage with our customers to assess whether they are satisfied and fully realizing the benefits of our platform. While these efforts often require a substantial commitment and upfront costs, we believe our investment in product, customer support, customer success and professional services will create opportunities to expand our customer relationships over time.

Sales and Marketing

We offer our platform to our customers as a subscription-based service. Subscription fees are based upon the chosen Domo package which includes tier-based platform capabilities as well as the number of users. Business leaders, department heads and managers are the typical initial subscribers to our platform, deploying Domo to solve a business problem or to enable departmental access to critical data. Over time, as customers recognize the value of our platform, we increasingly engage with CIOs and other executives to facilitate broad enterprise adoption. A majority of our customers subscribe to our services through multi-year contracts. As of January 31, 2020, 55% of our customers were under multi-year contracts, compared to 42% and 32% of customers as of January 31, 2019 and 2018, respectively. This transition to a higher percentage of multi-year contracts, among both new and existing customers, has enhanced the predictability of our subscription revenue. We typically invoice our customers annually in advance, but have recently seen an increase in semi-annual and quarterly billing terms. Our one-year and multi-year contracts generally automatically renew for additional one-year terms, with each party having the option to elect not to renew, and generally may not be canceled absent material breach by us or the customer. A majority of our annual recurring revenue is up for renewal during the fiscal year ending January 31, 2021.

We primarily generate sales through our direct sales team, which includes both inside sales and field sales personnel. We also make it easy for users and organizations to sign up for free trials on our website, which can be converted to paid subscriptions by the user.

We generate customer leads, accelerate sales opportunities and build brand awareness through our marketing programs. Our marketing programs target C-level, and senior line of business leaders spanning all functional areas of a business, including sales, marketing, finance, human resources and information technology. We also host Domopalooza, our annual user conference for current customers and prospects.

We have also developed go-to-market partnerships with a number of key technology, system integrator and consultant partners both domestically and internationally to help customers and potential customers validate our solutions and provide introductions to potential customers, and in some cases to resell or provide professional services related to our platform. We anticipate that we will continue to develop a select number of third-party relationships to help grow our business.

Historically, a significant portion of field sales and professional services were conducted in person. Currently, as a result of the work and travel restrictions related to the ongoing coronavirus outbreak, substantially all of our sales and professional services activities are being conducted remotely. As of the date of this report, we do not yet know the extent of the negative impact on our ability to attract, serve, retain or upsell customers. Furthermore, existing and potential customers may choose to reduce or delay technology spending in response to the coronavirus outbreak, or attempt to renegotiate contracts and obtain concessions, which may materially and negatively impact our operating results, financial condition and prospects.

Competition

Historically, software companies have not offered solutions that meet the needs of an organization with respect to providing real-time intelligence on business operations to all users, from the CEO to the frontline. In many cases, organizations do not have any solution or otherwise rely on manual business processes such as spreadsheets and reports, or combinations of single solution software. Certain features of our platform compete with products offered by various companies including those that fall into the following categories:

- large software companies, including suppliers of traditional business intelligence products that provide one or more capabilities that are competitive with our products, such as Microsoft Corporation, Oracle Corporation, SAP AG and IBM;

- business analytics software companies, such as Tableau Software, Inc. (recently acquired by salesforce.com, inc.), Qlik Technologies, Looker Data Sciences, Inc. (recently acquired by Alphabet, Inc.), Sisense, Inc., and Tibco Software, Inc.; and

- SaaS-based products or cloud-based analytics providers such as salesforce.com, inc. and Infor, Inc.

We believe that the principal competitive factors in our markets include the following:

- user-centric design;
- ease of adoption and use;
- features and platform experience;
- enterprise-grade performance, including scalability, reliability and query response time;
- brand;
- security, governance and privacy;
- accessibility across mobile devices, operating systems, and applications;
- breadth of data source connectivity through third-party integration;
- customer support;
- continued innovation; and
- pricing.

We believe that we compete effectively on each of the factors listed above; however, we expect competition to intensify in the future. It is possible that the large software vendors who currently do not have a competitive offering, some of which operate in adjacent product categories today, may in the future bring such a solution to market through product development, acquisitions or other means. In addition, several of our competitors have greater name recognition, much longer operating histories, more and better-established customer relationships, larger sales forces, larger marketing and software development budgets and significantly greater resources than we do. Therefore, it is possible that we may not compete favorably with respect to certain of the foregoing factors.

Current and future competitors may also continue to make strategic acquisitions or establish cooperative relationships among themselves or with others. By doing so, these competitors may increase their ability to meet the needs of customers. These relationships may limit our ability to sell or certify our platform through specific distributors, technology providers, database companies and distribution channels and allow competitors to rapidly gain significant market share. These developments could limit our ability to obtain revenue from existing and new customers. If we are unable to compete successfully against competitors, our business, operating results and financial condition would be harmed.

Data Center Operations

We rely heavily on data centers and other technologies and services provided by third parties in order to operate critical functions of our business. We serve our customers from multiple data centers in the following geographies: North America, Western Europe, Canada and Australia. The data centers we use are designed to host mission-critical computer systems with fully redundant subsystems and compartmentalized security zones. Our platform runs within third-party data centers. As of January 31, 2020, we used Amazon Web Services, or AWS, data center facilities located in Western Europe, North America and Australia. We committed to spend an aggregate of $60.0 million between January 2020 and December 2024 pursuant to our agreement with AWS. If we fail to meet the minimum purchase commitment during any year, we are required to pay the difference. AWS may terminate the agreement upon written notice to us for cause, including any material breach by us. We also use Microsoft Azure data centers in the United States to host customer data and partner with a third-party provider to maintain Company owned physical servers at an Equinix data center in the United States.

We and our third-party data center providers maintain a formal and comprehensive security program designed to ensure the security and integrity of customer data, protect against security threats or data breaches, and prevent unauthorized access to the data of our customers. We and our third-party data center providers strictly regulate and limit all access to on-demand servers and networks at our production and remote backup facilities.

We apply a wide variety of strategies to achieve better than 99.9% systems availability for our subscription services, excluding scheduled maintenance. Our systems are continually monitored for any signs of problems, and we strive to take preemptive action when necessary. Our data center facilities and the third-party data centers employ advanced measures designed to ensure physical integrity, including redundant power and cooling systems, and advanced fire and flood prevention.

Research and Development

We focus our efforts on anticipating customer demand to remain competitive in the marketplace. Our ability to compete depends in large part on our continuous commitment to research and development and our ability to introduce new platform enhancements, applications, technologies, features and capabilities in a timely manner. Our research and development organization is responsible for design, development, testing, release and maintenance. Our efforts are focused on developing new platform enhancements, use cases, and features and further enhancing the functionality, reliability, performance and flexibility of existing solutions.

Research and development expenses were $78.3 million, $75.7 million and $69.2 million for the fiscal years ended January 31, 2018, 2019 and 2020, respectively.

Intellectual Property

We rely on a combination of trade secret, copyright, trademark, patent and other intellectual property laws, contractual arrangements, such as assignment, confidentiality and non-disclosure agreements, and confidentiality procedures and technical measures to gain rights to and protect the technology and intellectual property used in our business. We actively pursue registration of our trademarks and service marks in the United States and abroad.

As of January 31, 2020, we owned 111 issued U.S. patents and 11 pending U.S. patent applications. We also owned five patents in the People's Republic of China, one patent in Australia, one patent in Canada and one patent in Japan. The issued U.S. patents that we own are expected to expire between September 2020 and September 2035. We have sole ownership of all of our U.S. patents and pending U.S. patent applications.

Our applications use “open source” software. Open source software is made available to the general public in source code form for use, modification and redistribution on an “as-is” basis under the terms of a non-negotiable license. We also rely on other technology that we license from third parties. Though such third-party technology may not continue to be available to us on commercially reasonable terms, we believe that alternative technology would be available to us.

Our policy is to require employees and independent contractors to sign agreements assigning to us any inventions, trade secrets, works of authorship, and other technology and intellectual property created by them on our behalf and agreeing to protect our confidential information, and all of our key employees and independent contractors have done so. In addition, we generally enter into confidentiality agreements with our vendors and customers. We also control and monitor access to our software, source code and other proprietary information.

Regulatory Matters

Data privacy, information security and data protection with respect to the collection, storage, and other processing of personal data continue to be focuses of worldwide legislation and regulation. We are subject to data privacy, data protection and information security regulation by data protection authorities in the United States (including the states in which we conduct our business) and in other countries where we conduct our business. These regulations include laws requiring holders of personal data to maintain safeguards and to take certain actions in response to a data breach. In the European Union, the General Data Protection Regulation, requires comprehensive information privacy and security protections for natural persons with respect to personal data collected about them. We post on our website a privacy policy concerning the processing, use and disclosure of personal data, and certify adherence to and compliance with the U.S. Department of Commerce’s Privacy Shield Principles and the E.U.-U.S. and Swiss-U.S. Privacy Shield Frameworks. Our publication of our Privacy Shield certification, our privacy policy, and other statements we publish regarding privacy, data protection and information security may subject us to potential governmental action if they are found to be deceptive or misrepresentative of our practices or in violation of applicable privacy law. We also may be bound from time to time by contractual obligations, including model contract provisions approved by the European Commission, that impose additional restrictions on our handling of personal data.

The legal environment of internet-based businesses is evolving rapidly in the United States, the European Union and elsewhere. The manner in which existing laws and regulations are applied in this environment, and how they will relate to our business in particular, both in the United States and internationally, is often unclear. For example, we sometimes cannot be certain which laws will be deemed applicable to us given the global nature of our business, including with respect to such topics as data privacy and security, pricing, advertising, taxation, content regulation, and intellectual property ownership and infringement or other violations of intellectual property rights. In particular, the various privacy, data protection and data security legal obligations that apply to us may evolve in a manner that relates to our practices or the features of our applications or platform, and we may need to take additional measures to comply with such changes in legal obligations and to maintain and improve our information security posture in an effort to avoid information security incidents or breaches affecting personal data or other sensitive or proprietary information.

Data Security

Domo is designed to meet enterprise security, compliance and privacy requirements of our customers, particularly in highly regulated industries, such as financial services, health care, pharmaceuticals, energy and technology. Our architecture is designed to allow customers to maintain control of their data through various means including: multiple logical and physical security layers; least privilege and separation of duties access model; threat assessments of each new feature; transport layer encryption and encryption at rest that allows customers to manage their own encryption keys using Domo’s Bring Your Own Key, or BYOK; and extensive logging and monitoring of network, system and application events.

We voluntarily engage independent third-party security auditors to test our systems and controls at least annually against several widely recognized security standards and regulations.

We have completed a SOC 1 and SOC 2 + HITRUST Common Security Framework, or CSF, examination. Service Organization Controls, or SOC, are standards established by the American Institute of Certified Public Accountants for reporting on internal control environments implemented within an organization. We have also been certified as compliant with ISO 27001 and ISO 27018 standards. The ISO 27001 security standard specifies the requirements for establishing, implementing, operating, monitoring, reviewing, maintaining and improving a documented Information Security Management System within the context of the organization’s overall business risks. This standard addresses confidentiality, access control, vulnerability and risk assessment. ISO 27018 establishes commonly accepted control objectives, controls and guidelines for implementing measures to protect personally identifiable information in accordance with the privacy principles in ISO/IEC 29100 for a cloud computing environment. Furthermore, we have completed our annual third party validation of HIPAA Security and Privacy Risk Analysis. We sign business associate agreements with our customers who require them in support of compliance with the Health Insurance Portability and Accountability Act, or HIPAA, and the Health Information Technology for Economic and Clinical Health Act, or HITECH.

We have also completed our annual audits to evaluate our compliance with GDPR and CCPA requirements. Our datacenter facilities and services providers also regularly undergo ISO 27001 or SOC 1 or SOC 2 audits and numerous other audits to verify their security practices.

We complete the two industry-leading information security questionnaires. This includes the Shared Assessments Standardized Information Gathering, or SIG, questionnaire, as well as the Cloud Security Alliance Consensus Assessments Initiative Questionnaire, or CSA CAIQ. The SIG is composed of approximately 1,400 security questions spanning 17 domains. The CSA CAIQ is a set of security questions focused on cloud security controls, and it is mapped to numerous industry programs and standards including ISO 27001, NIST SP 800-53, and COBIT, amongst others. Both of these information security industry questionnaires assist organizations in evaluating a cloud provider's operations and processes.

Employees

As of January 31, 2020, we had 802 employees, of which 657 work in the United States. None of our employees are represented by a labor union, and we believe our employee relations are good.

Corporate Information

We were originally incorporated in Delaware in September 2010 under the corporate name "Shacho, Inc." We changed our name to "Domo, Inc."in December 2011. Our principal executive offices are located at 772 East Utah Valley Drive, American Fork, UT 84003, and our telephone number is (801) 899-1000. Our website address is www.domo.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K.

Available Information

The following filings are available through our investor relations website after we file them with the Securities and Exchange Commission, or SEC: Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and our Proxy Statement for our annual meeting of stockholders. These filings are also available for download free of charge on our investor relations website. Our investor relations website is located at ir.domo.com. The SEC also maintains an Internet website that contains reports, proxy statements and other information about issuers, like us, that file electronically with the SEC. The address of that website is http://www.sec.gov.

We webcast our earnings calls and certain events we participate in or host with members of the investment community on our investor relations website. Additionally, we provide notifications of news or announcements regarding our financial performance, including SEC filings, investor events, and press and earnings releases as part of our investor relations website. Further corporate governance information, including our corporate governance guidelines and code of conduct, is also available on our investor relations website under the heading "Governance." The contents of our websites are not intended to be incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only.

Item 1A. Risk Factors

You should carefully consider the following risk factors, in addition to the other information contained in this report, including the section of this report captioned "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes. If any of the events described in the following risk factors or the risks described elsewhere in this report occurs, our business, operating results and financial condition could be seriously harmed. This report also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of factors that are described below and elsewhere in this report.

Risks Related to Our Business and Industry

The ongoing outbreak of coronavirus around the world could adversely impact our business and operating results.

A novel strain of coronavirus, COVID-19, emerged in China in December 2019 and began to spread globally, including to the United States, in early 2020. The World Health Organization has declared COVID-19 to be a public health emergency of international concern. The full impact of the COVID-19 outbreak is inherently uncertain at the time of this report. The COVID-19 outbreak has resulted in travel restrictions and in some cases, prohibitions of non-essential activities, disruption and shutdown of businesses and greater uncertainty in global financial markets.

We cannot predict the extent to which the COVID-19 outbreak will impact our business or operating results, which is highly dependent on inherently uncertain future developments, including the severity of COVID-19 and the actions taken by governments and private businesses in relation to COVID-19 containment. In geographies in which we or our customers, partners and service providers operate, health concerns as well as political or governmental developments in response to COVID-19 could result in economic, social or labor instability or prolonged contractions in the industries in which our customers or partners operate, slow our sales process, result in customers not purchasing or renewing our products or failing to make payments, and could otherwise have a material adverse effect on our business and our results of operations and financial condition. Because our platform is offered as a subscription-based service, the effect of the outbreak may not be fully reflected in our operating results until future periods, if at all.

Historically, a significant portion of field sales and professional services were conducted in person. Currently, as a result of the work and travel restrictions related to the ongoing coronavirus outbreak, substantially all of our sales and professional services activities are being conducted remotely. As of the date of this report, we do not yet know the extent of the negative impact on our ability to attract, serve, retain or upsell customers. Furthermore, existing and potential customers may choose to reduce or delay technology spending in response to the coronavirus outbreak, or attempt to renegotiate contracts and obtain concessions, which may materially and negatively impact our operating results, financial condition and prospects.

Economic uncertainties or downturns could materially adversely affect our business.

Current or future economic uncertainties or downturns, including those caused by the ongoing COVID-19 outbreak (as discussed above), could adversely affect our business and operating results. Negative conditions in the general economy both in the United States and abroad, including conditions resulting from changes in gross domestic product growth, the continued sovereign debt crisis, financial and credit market fluctuations, political deadlock, natural catastrophes, pandemics, warfare and terrorist attacks on the United States, Europe, the Asia Pacific region or elsewhere, could cause a decrease in business investments, including corporate spending on business intelligence software in general and negatively affect the rate of growth of our business.

General worldwide economic conditions may experience significant downturns and may be unstable. These conditions make it extremely difficult for our customers and us to forecast and plan future business activities accurately, and they could cause customers to reevaluate their decisions to subscribe to our platform, which could delay and lengthen our sales cycles or result in cancellations of planned purchases. Furthermore, during challenging economic times customers may tighten their budgets and face issues in gaining timely access to sufficient credit, which could result in an impairment of their ability to make timely payments to us. In turn, we may be required to increase our allowance for doubtful accounts, which would adversely affect our financial results.

For example, the rapid spread of coronavirus globally in early 2020 has resulted in travel restrictions and in some cases, prohibitions of non-essential travel, disruption and shutdown of businesses and greater uncertainty in global financial markets. Health concerns or political or governmental developments in countries in which we or our customers, partners and service providers operate could result in economic, social or labor instability, slow our sales process, result in customers not purchasing or renewing our products or failing to make payments, and could otherwise have a material adverse effect on our business and our results of operations and financial condition. The extent to which the coronavirus impacts our results will depend on future developments, which are highly uncertain and will include emerging information concerning the severity of the coronavirus and the actions taken by governments and private businesses to attempt to contain the coronavirus. Any prolonged contractions in the industries in which our customers or partners operate could materially and adversely impact our business, results of operations and financial condition.

To the extent subscriptions to our platform are perceived by customers and potential customers to be discretionary, our revenue may be disproportionately affected by delays or reductions in general information technology spending. Also, customers may choose to develop in-house software as an alternative to using our platform. Moreover, competitors may respond to market conditions by lowering prices and attempting to lure away our customers. In addition, the increased pace of consolidation in certain industries may result in reduced overall spending on our platform.

We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular industry. If the economic conditions of the general economy or industries in which we operate do not improve, or worsen from present levels, our business, operating results, financial condition and cash flows could be adversely affected.

We have a history of losses, and we may not be able to generate sufficient revenue to achieve or maintain profitability in the future.

We incurred net losses of $176.6 million, $154.3 million and $125.7 million for the years ended January 31, 2018, 2019 and 2020, respectively, and had an accumulated deficit of $1,037.7 million at January 31, 2020. We may not be able to generate sufficient revenue to achieve or sustain profitability. We expect to continue to incur losses for the foreseeable future and we expect costs to increase in future periods as we expend substantial financial and other resources on, among other things:

- sales and marketing, including any expansion of our direct sales organization, which will require time before these investments generate sales results;
- technology and data center infrastructure, enhancements to cloud architecture, improved disaster recovery protection, increasing data security, compliance and operations expenses;
- data center costs as customers increase the amount of data that is available to our platform and the number of users on our platform;
- other software development, including enhancements and modifications related to our platform;
- international expansion in an effort to increase our customer base and sales;
- general and administration, including significantly increasing expenses in accounting and legal related to the increase in the sophistication and resources required for public company compliance and other work arising from the growth and maturity of the company;
- competing with other companies, custom development efforts and open source initiatives that are currently in, or may in the future enter, the markets in which we compete;
- maintaining high customer satisfaction and ensuring quality and timely releases of platform enhancements and applications;
- developing our indirect sales channels and strategic partner network;
- maintaining the quality of our cloud and data center infrastructure to minimize latency when using our platform;
- increasing market awareness of our platform and enhancing our brand;
- maintaining compliance with applicable governmental regulations and other legal obligations, including those related to intellectual property and international sales; and
- attracting and retaining top talent in a competitive market.

These expenditures may not result in additional revenue or the growth of our business. If we fail to continue to grow revenue or to achieve or sustain profitability, the market price of our Class B common stock could be adversely affected.

We have a limited operating history, which makes it difficult to evaluate our prospects and future operating results.

We were incorporated in 2010 and publicly announced our platform in 2015. Our limited operating history makes our ability to forecast future operating results difficult and subjects us to a number of uncertainties, including our ability to plan and model future growth. Revenue grew 31% in the fiscal year ended January 31, 2019 compared to the prior year; however, revenue grew only 22% in the year ended January 31, 2020 compared to the prior year, and historical revenue growth is not necessarily indicative of future performance. Our revenue growth rate is expected to decline in future periods due to a number of reasons, which may include the maturation of our business, increase in overall revenue over time, slowing demand for our platform, increasing competition, a decrease in the growth of the markets in which we compete, or if we fail, for any reason, to continue to capitalize on growth opportunities, a decrease in our renewal rates, or a decline in upsells.

We have encountered and will continue to encounter risks and uncertainties frequently experienced by growing companies in rapidly changing industries, such as determining appropriate investments of our limited resources, market adoption of our platform, competition, acquiring and retaining customers, hiring, integrating, training and retaining skilled personnel (including sales personnel), developing new platform enhancements and applications, determining prices and contract terms, improving our internal controls and unforeseen expenses and challenges in forecasting accuracy. If our assumptions regarding these risks and uncertainties, which we use to plan our business, are incorrect or change, or if we do not address these risks successfully, our prospects, operating results and business could be adversely affected.

We have been growing and expect to continue to invest in our growth for the foreseeable future. If we fail to manage this growth effectively, our business and operating results will be adversely affected.

We intend to continue to grow our business. If we cannot adequately train new employees, including our direct sales force, or if new employees are not as productive as quickly as we would like, sales may decrease or customers may lose confidence in the knowledge and capability of our employees. In addition, we may make direct investments in our international business. We must successfully manage growth to achieve our objectives. Although our business has experienced significant growth in the past, we cannot provide any assurance that our business will continue to grow at any particular rate, or at all.

Our ability to effectively manage the growth of our business will depend on a number of factors, including our ability to do the following:

- effectively recruit, integrate, train and motivate new employees and make them productive, including our direct sales force, while retaining existing employees, maintaining the beneficial aspects of our corporate culture and effectively executing our business plan;
- attract new customers, and retain and increase usage by existing customers;
- recruit and successfully leverage channel partners and app developers;
- successfully enhance our platform;
- continue to improve our operational, financial and management controls;
- protect and further develop strategic assets, including intellectual property rights; and
- manage market expectations and other challenges associated with operating as a public company.

These activities will require significant financial resources and allocation of valuable management and employee resources, and growth will continue to place significant demands on management and our operational and financial infrastructure.

Our future financial performance and ability to execute our business plan will depend, in part, on our ability to effectively manage any future growth. There are no guarantees we will be able to do so. In particular, any failure to successfully implement systems enhancements and improvements will likely negatively impact our ability to manage our expected growth, ensure uninterrupted operation of key business systems and comply with the rules and regulations that are applicable to public reporting companies. Moreover, if we do not effectively manage the growth of our business and operations, the quality of our platform could suffer, which could negatively affect our brand, operating results and business.

Our ability to raise capital in the future may be limited, and if we fail to raise capital when needed in the future, we could be prevented from growing or could be forced to delay or eliminate product development efforts or other operations.

Our business and operations may consume resources faster than we anticipate. We have incurred cumulative and recurring losses from operations since inception and had an accumulated deficit of $1,037.7 million as of January 31, 2020. We have also experienced negative cash flows from operating activities since inception, including cash used in operating activities of $148.7 million, $131.4 million and $80.2 million for the years ended January 31, 2018, 2019 and 2020, respectively. As of January 31, 2020, we had cash and cash equivalents of $80.8 million, short-term investments of $18.0 million and no amounts available to draw under our credit facility.

We may need to raise additional funds to invest in growth opportunities, to continue product development and sales and marketing efforts, and for other purposes. Additional financing may not be available on favorable terms, if at all. If adequate funds are not available on acceptable terms, we may be unable to meet our obligations, invest in future growth opportunities, or continue operations at anticipated levels, which could harm our business and operating results. In addition, current and future debt instruments may impose restrictions on our ability to dispose of property, make changes in our business, engage in mergers or acquisitions, incur additional indebtedness, and make investments and distributions. Furthermore, if we issue additional equity securities, stockholders will experience dilution, and the new equity securities could have rights senior to those of our common stock. Because our decision to issue securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any such future offerings. As a result, stockholders bear the risk that future securities offerings reduce the market price of our Class B common stock and dilute their interest.

We face intense competition, and we may not be able to compete effectively, which could reduce demand for our platform and adversely affect our business, growth, revenue and market share.

The market for our platform is intensely and increasingly competitive and subject to rapidly changing technology and evolving standards. In addition, many companies in our target market are offering, or may soon offer, products and services that may compete with our platform. Furthermore, many potential customers have made significant investments in legacy software systems and may be unwilling to invest in new solutions.

Our current primary competitors generally fall into the following categories:

- large software companies, including suppliers of traditional business intelligence products that provide one or more capabilities that are competitive with our products, such as Microsoft Corporation, Oracle Corporation, SAP AG and IBM;

- business analytics software companies, such as Tableau Software, Inc., Qlik Technologies, Looker Data Sciences, Inc., Sisense, Inc., and Tibco Software, Inc.; and

- SaaS-based products or cloud-based analytics providers such as salesforce.com, inc. and Infor, Inc.

We expect competition to increase as other established and emerging companies enter the markets in which we compete, as customer requirements evolve and as new products and technologies are introduced. For example, salesforce.com, inc. acquired Tableau Software, Inc. in August 2019 and Alphabet Inc. acquired Looker Data Sciences, Inc. in February 2020.

Many competitors, particularly the large software companies named above, have longer operating histories, significantly greater financial, technical, research and development, marketing, distribution, professional services or other resources and greater name recognition than we do. In addition, many competitors have strong relationships with current and potential customers, channel partners and development partners and extensive knowledge of markets in which we compete. As a result, they may be able to respond more quickly to new or emerging technologies and changes in customer requirements, for example by devoting greater resources to the development, promotion and sale of their products than we do.

Moreover, many of these competitors may bundle their data management and analytics products into larger deals or maintenance renewals, often at significant discounts or at no charge. Increased competition may lead to price cuts, alternative pricing structures or the introduction of products available for free or a nominal price, fewer customer orders, reduced gross margins, longer sales cycles and loss of market share. We may not be able to compete successfully against current and future competitors, and our business, operating results and financial condition will be harmed if we fail to meet these competitive pressures. Even if we are successful in acquiring and retaining customers, those customers may continue to use our competitors' products in addition to our products.

Our ability to compete successfully depends on a number of factors, both within and outside of our control. Some of these factors include ease and speed of platform deployment and use, accessibility across mobile devices, operating systems, and applications, discovery and visualization capabilities, analytical and statistical capabilities, performance and scalability, the quality of our data security infrastructure, the quality and reliability of our customer service and support, total cost of ownership, return on investment and brand recognition. Any failure by us to compete successfully in any one of these or other areas may reduce the demand for our platform, as well as adversely affect our business, operating results and financial condition.

Moreover, current and future competitors may also make strategic acquisitions or establish cooperative relationships among themselves or with others. By doing so, these competitors may increase their ability to meet the needs of customers. These relationships may limit our ability to sell or certify our platform through specific distributors, technology providers, database companies and distribution channels and allow competitors to rapidly gain significant market share. These developments could limit our ability to obtain revenue from existing and new customers. If we are unable to compete successfully against competitors, our business, operating results and financial condition would be harmed.

If we are unable to attract new customers in a manner that is cost-effective, our revenue growth could be slower than we expect and our business may be harmed.

To increase our revenue, we must add new customers. Demand for our platform is affected by a number of factors, many of which are beyond our control, such as continued market acceptance of our platform for existing and new use cases, the timing of development and release of new applications and features, technological change, growth or contraction in our addressable market, and accessibility across mobile devices, operating systems, and applications, and macroeconomic changes, including the impact of the COVID-19 outbreak, on the demand for technology solutions like ours. In addition, if competitors introduce lower cost or differentiated products or services that are perceived to compete with our features, our ability to sell our features based on factors such as pricing, technology and functionality could be impaired. As a result, we may be unable to attract new customers at rates or on terms that would be favorable or comparable to prior periods, which could negatively affect the growth of our revenue.

Even if we do attract customers, the cost of new customer acquisition may prove so high as to prevent us from achieving or sustaining profitability. We recognize subscription revenue ratably over the term of the subscription period. In general, customer acquisition costs and other upfront costs associated with new customers are much higher in the first year than the aggregate revenue we recognize from those new customers in the first year. As a result, the profitability of a customer to our business in any particular period depends in part upon how long a customer has been a subscriber and the degree to which it has expanded its usage of our platform. Additionally, we intend to continue to hire additional sales personnel to grow our domestic and international operations. If our sales and marketing efforts do not result in substantial increases in revenue, our business, results of operations, and financial condition may be adversely affected.

If customers do not renew their contracts with us or reduce the number of users of our platform, our revenue will decline and our operating results and financial condition may be adversely affected.

The initial terms of our customer contracts typically vary in length between one and three years, and our customers have no obligation to renew their subscriptions after the expiration of their initial subscription periods. In some cases, the contracts automatically renew (with each party having the option to elect not to renew), but in circumstances where that is not the case, our customers may unilaterally elect not to renew, may seek to renew for lower subscription amounts or for shorter contract lengths, or may choose to renew for the same or fewer applications over time. A majority of our annual recurring revenue is up for renewal during the fiscal year ending January 31, 2021. Our renewal rates may decline or fluctuate as a result of a number of factors, including leadership changes within our customers resulting in loss of sponsorship, limited customer resources, pricing changes by us or competitors, customer satisfaction with our platform and related applications, the acquisition of customers by other companies, procurement or budgetary decisions, and deteriorating general economic conditions, including as a result of the COVID-19 outbreak. To the extent our customer base continues to grow, renewals and additional subscriptions by renewing customers will become an increasingly important part of our results. If our customers do not renew their subscriptions, or decrease the amount they spend with us, revenue will decline and our business will be harmed.

If customers do not expand the number of users of our platform or adopt additional use cases our growth prospects, operating results and financial condition may be adversely affected.

Our future success depends on our ability to increase the deployment of our platform within and across our existing customers and future customers. Many of our customers initially deploy our platform to specific groups or departments within their organization or for a limited number of use cases. Our growth prospects depend on our ability to persuade customers to expand their use of our platform to additional groups, departments and use cases across their organization. Historically, we have made significant investments in research and development to build our platform and to offer enterprise customers the features and functionality that they require.

Because our recent growth has resulted in the rapid expansion of our business, we do not have a long history upon which to base forecasts of customer renewal rates, customer upsells or future revenue. As a result, future operating results may be significantly below the expectations of investors, which could harm the market price of our Class B common stock.

The loss of one or more of our key customers, or a failure to renew our subscription agreements with one or more of our key customers, could negatively affect our ability to market our platform.

We rely on our reputation and recommendations from key customers in order to promote subscriptions to our platform. The loss of, or failure to renew by, any of our key customers could have a significant effect on our revenue, reputation and our ability to obtain new customers. In addition, acquisitions of our customers could lead to cancellation of such customers' contracts, thereby reducing the number of our existing and potential customers.

Future operating results and key metrics may fluctuate significantly due to a wide range of factors, which makes our future results difficult to predict.

Our operating results and key metrics could vary significantly from quarter to quarter as a result of various factors, some of which are outside of our control, including:

- the expansion of our customer base;
- the size, duration and terms of our contracts with both existing and new customers;
- the introduction of products and product enhancements by competitors, and changes in pricing for products offered by us or our competitors;
- customers delaying purchasing decisions in anticipation of new products or product enhancements by us or our competitors or otherwise;
- changes in customers' budgets;
- seasonal variations in our sales, which have generally historically been highest in our fourth fiscal quarter and lowest in the second and third fiscal quarters;
- the timing of satisfying revenue recognition criteria, particularly with regard to large transactions;
- the amount and timing of payment for expenses, including infrastructure costs to deliver our platform, research and development, sales and marketing expenses, employee benefit and stock-based compensation expenses and costs related to Domopalooza, our annual user conference that occurs in our first fiscal quarter;
- costs related to the hiring, training and maintenance of our direct sales force;
- the timing and growth of our business, in particular through the hiring of new employees and international expansion; and
- general economic and political conditions, both domestically and internationally, as well as economic conditions specifically affecting industries in which our customers operate, including the impacts of the ongoing COVID-19 outbreak around the world.

Any one of these or other factors discussed elsewhere in this report may result in fluctuations in our operating results, meaning that quarter-to-quarter comparisons may not necessarily be indicative of our future performance.

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

We offer our platform primarily through subscription agreements, which typically vary in length between one and three years, and may in many cases be subject to automatic renewal or renewal only at a customer's discretion. We generally invoice our customers in annual installments at the beginning of each year in the subscription period. Amounts that have been invoiced are initially recorded as deferred revenue and are recognized ratably over the subscription period. As a result, most of the revenue that we report in each period is derived from the recognition of deferred revenue relating to subscriptions entered into during previous periods. A decline in new or renewed subscriptions in any one quarter is not likely to have a material impact on results for that quarter. However, declines would negatively affect revenue and deferred revenue balances in future periods, and the effect of significant downturns in sales and market acceptance of our platform, and potential changes in our rate of renewals, may not be fully reflected in our results of operations until future periods. Our subscription model also makes it difficult for us to rapidly increase our total revenue through additional sales in any period, as revenue from new customers is recognized over the applicable subscription term. We may be unable to adjust our cost structure to reflect the changes in revenue. In addition, a significant majority of our costs are expensed as incurred, while revenue is generally recognized over the life of the customer agreement. As a result, increased growth in the number of our customers could result in our recognition of more costs than revenue in the earlier periods of the terms of our agreements.

The length, cost and uncertainty associated with sales cycles for enterprise customers may result in fluctuations in our operating results and our failure to achieve the expectations of investors.

We target sales efforts at enterprise customers, which we define as companies with over $1 billion in revenue, and face long sales cycles, complex customer requirements, substantial upfront sales costs, and a relatively low and difficult to predict volume of sales on a quarter-by-quarter basis. This makes it difficult to predict with certainty our sales and related operating performance in any given period. Our sales cycle for new enterprise customers varies from approximately six months to multiple years. Customers often undertake a prolonged evaluation of our platform, including assessing their own readiness, scoping the professional services involved, and comparing our platform to products offered by competitors and their ability to solve the problem internally. Events may occur during this period that affect the size or timing of a purchase or even cause cancellations, which may lead to greater unpredictability in our business and operating results. Moreover, customers often begin to use our platform on a limited basis with no guarantee that they will expand their use of our platform widely enough across their organization to justify the costs of our sales efforts. We may also face unexpected implementation challenges with enterprise customers or more complicated installations of our platform. It may be difficult to deploy our platform if the customer has unexpected database, hardware or software technology issues.

Adherence to our financial plan in part depends on managing the mix of customers, the rate at which customers add users within their organizations, the number of use cases they employ, and the timing and amount of upsells, all of which affect annual contract value. Our financial performance and the predictability of our quarterly financial results may be harmed by failures to secure the higher value enterprise agreements in a timely manner or at all, or changes in the volume of transactions overall, compared to our forecasts, and depends in large part on the successful execution of our direct sales team. The predictability of billings may be adversely impacted by fluctuations in the proportion of contracts that are not billed annually in advance.

Additionally, our quarterly sales cycles are generally more heavily weighted toward the end of the quarter with an increased volume of sales in the last few weeks and days of the quarter. This impacts the timing of recognized revenue and billings, cash collections and delivery of professional services. Furthermore, the concentration of contract negotiations in the last few weeks and days of the quarter could require us to expend more in the form of compensation for additional sales, legal and finance employees and contractors. Compression of sales activity to the end of the quarter also greatly increases the likelihood that sales cycles will extend beyond the quarter in which they are forecasted to close for some sizeable transactions, which will harm forecasting accuracy and adversely impact billings and new customer acquisition and renewal metrics for the quarter in which they are forecasted to close.

If we fail to effectively develop and expand our sales and marketing capabilities, our ability to increase our customer base and increase acceptance of our platform could be harmed.

To increase the number of customers and increase the market acceptance of our platform, we will need to expand our sales and marketing operations, including our domestic and international sales force. We will continue to dedicate significant resources to sales and marketing programs. We believe that there is significant competition for direct sales personnel with the sales skills and technical knowledge that we require. Our ability to achieve significant revenue growth in the future will depend, in large part, on our success in recruiting, training and retaining a sufficient number of direct sales personnel and sales leadership. We have recently experienced turnover in our senior sales leadership which may adversely affect our operating results and prospects. New hires require significant training and time before they achieve full productivity, particularly in new sales territories. Recent hires and planned hires may not become as productive as quickly as we would like, changes in sales leadership could adversely affect our existing sales personnel, and we may be unable to hire or retain sufficient numbers of qualified individuals in the future in the markets where we do business. The effectiveness of our sales and marketing has also varied over time and, together with the effectiveness of any partners or resellers we may engage, may vary in the future. Our business and operating results may be harmed if our efforts do not generate a correspondingly significant increase in revenue. We may not achieve revenue growth from expanding our sales force if we are unable to hire, develop and retain talented sales personnel, if our new sales personnel are unable to achieve desired productivity levels in a reasonable period of time, or if our sales and marketing programs are not effective.

We do not have a long history with our subscription or pricing models and changes could adversely affect our operating results.

We have limited experience with respect to determining the optimal prices and contract length for our platform. As the markets for our features grow, as new competitors introduce new products or services that compete with ours or reduce their prices, or as we enter into new international markets, we may be unable to attract new customers or retain existing customers at the same price. Moreover, large customers, which are the focus of our direct sales efforts, may demand greater price discounts.

As we expand internationally, we also must determine the appropriate price to enable us to compete effectively internationally. In addition, if the mix of features we sell changes, then we may need to, or choose to, revise our pricing. As a result, in the future we may be required to reduce our prices or offer shorter contract durations, which could adversely affect our revenue, gross margin, profitability, financial condition and cash flow.

In addition, our competitors may offer different subscription or pricing models, such as by number of queries or data size, which may be more attractive to potential customers. We may be required to adjust our subscription or pricing models in response to these changes, which could adversely affect our financial performance.

We are subject to governmental laws, regulation and other legal obligations, particularly those related to privacy, data protection and information security, and any actual or perceived failure to comply with such obligations could impair our efforts to maintain and expand our customer base, causing our growth to be limited and harming our business.

We receive, store and process personal information and other data from and about customers in addition to our employees and services providers. Also, in connection with future feature offerings, we may receive, store and process additional types of data, including personally identifiable information, related to end consumers. Our handling of data is subject to a variety of laws and regulations, including regulation by various government agencies, such as the U.S. Federal Trade Commission, or FTC, and various state, local and foreign agencies. Our data handling also is subject to contractual obligations and may be deemed to be subject to industry standards, including certain industry standards that we undertake to comply with.

The U.S. federal and various state and foreign governments have adopted or proposed limitations on the collection, distribution, use and storage of data relating to individuals, including the use of contact information and other data for marketing, advertising and other communications with individuals and businesses. In the United States, various laws and regulations apply to the collection, processing, disclosure, and security of certain types of data. Additionally, the FTC and many state attorneys general are interpreting federal and state consumer protection laws as imposing standards for the online collection, use, dissemination and security of data. The laws and regulations relating to privacy and data security are evolving, can be subject to significant change and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions. For example, California in 2018 enacted the California Consumer Privacy Act, or CCPA, which went into effect on January 1, 2020. The CCPA requires covered companies to provide new disclosures to California consumers, and afford such consumers new abilities to opt-out of certain sales of personal information. The CCPA is the subject of proposed regulations issued by the California Attorney General that have yet to be finalized. Aspects of the CCPA and its interpretation and enforcement remain unclear. We cannot fully predict the impact of the CCPA on our business or operations, but it may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Some observers have noted that the CCPA could mark the beginning of a trend toward more stringent state privacy legislation in the United States, and certain states have adopted or are considering legislation addressing privacy. Numerous or stringent state privacy laws could increase our potential liability and adversely affect our business.

In addition, several foreign countries and governmental bodies, including the European Union, or E.U., have laws and regulations dealing with the handling and processing of personal information obtained from their residents, which in certain cases are more restrictive than those in the United States. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure and security of various types of data, including data that identifies or may be used to identify an individual, such as names, email addresses and in some jurisdictions, Internet Protocol, or IP, addresses. Such laws and regulations may be modified or subject to new or different interpretations, and new laws and regulations may be enacted in the future. Within the E.U., in May 2018, a far-reaching new regulation governing data and privacy practices called the General Data Protection Regulation, or GDPR became effective and substantially replaced the data protection laws of the individual European Union member states. The GDPR includes stringent operational requirements for processors and controllers of personal data and imposes significant penalties for non-compliance of up to the greater of €20 million or 4% of global annual revenues. Complying with the GDPR, the CCPA, and other data protection laws and regulations may cause us to incur substantial operational costs or require us to modify our data handling practices. Actual or alleged non-compliance could result in proceedings against us by governmental entities or others (including a private right of action for affected individuals in certain instances) and may otherwise adversely impact our business, financial condition and operating results.

We have certified under the E.U.-U.S. Privacy Shield and the Swiss-U.S. Privacy Shield with respect to our transfer of certain personal data from the E.U. and Switzerland to the United States. The Privacy Shield program is subject to annual review and may be challenged, suspended or invalidated. The E.U.-U.S. Privacy Shield framework and the use of E.U. Standard Contractual Clauses, or the Model Clauses, to protect data exports between the European Union and the U.S. have been subject to legal challenges in the E.U. It is possible that the EU-U.S. Privacy Shield Framework or Model Clauses may be invalidated or modified as a result of these legal challenges or in connection with the annual review of the EU-U.S. Privacy Shield framework. Additionally, it is possible that the Privacy Shield program may be updated by the European Commission and Department of Commerce to take into account the GDPR. Any of these developments could result in us, and many other companies, needing to implement different or additional measures to establish or maintain legitimate means for the transfer and receipt of personal data from the European Union to the United States. We also may be at risk of experiencing reluctance or refusal of European or multi-national customers to use our solutions and being subject to regulatory action or incurring penalties. Any of these developments may have an adverse effect on our business.

Further, the United Kingdom formally withdrew from the E.U. effective January 2020, with a one-year transitional period scheduled to end on December 31, 2020. The United Kingdom’s departure from the E.U. and ongoing negotiations related to the United Kingdom’s future trade and other relationships with the E.U. have created uncertainty with regard to the future regulation of data protection in the United Kingdom. The United Kingdom has enacted a Data Protection Bill Act that substantially implements the GDPR. Uncertainty remains, however, regarding how matters such as cross-border data transfers involving the United Kingdom will be handled in the medium to long term. We may experience reluctance or refusal by current or prospective customers in Europe, including the United Kingdom, to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of European residents. The regulatory environment applicable to the handling of European residents’ personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs, and could result in our business, operating results and financial condition being harmed.

We also handle credit card and other personal information. Due to the sensitive nature of such information, we have implemented policies and procedures in an effort to preserve and protect our data and our customers' data against loss, misuse, corruption, misappropriation caused by systems failures, unauthorized access or misuse. Notwithstanding these policies, we could be subject to liability claims by individuals and customers whose data resides in our databases for the misuse of that information. If we fail to meet appropriate compliance levels, this could negatively impact our ability to utilize credit cards as a method of payment, and/or collect and store credit card information, which could disrupt our business.

We sign business associate agreements with our customers who require them in order to comply with the Health Insurance Portability and Accountability Act, or HIPAA, and the Health Information Technology for Economic and Clinical Health Act, or HITECH, and therefore we are directly subject to certain provisions of HIPAA applicable to business associates. We may collect and process protected health information as part of our HIPAA compliant service, which may subject us to a number of data protection, security, privacy and other government- and industry-specific requirements. In addition, if we are unable to protect the privacy and security of protected health information, we could be found to have breached our contracts with customers with whom we have a business associate relationship. Noncompliance with laws and regulations relating to privacy and security of personal information, including HIPAA, or with contractual obligations under any business associate agreement may lead to significant fines, civil and criminal penalties, or liabilities. The U.S. Department of Health and Human Services, or HHS, audits the compliance of business associates and enforces HIPAA privacy and security standards. HHS enforcement activity has become more significant over the last few years and HHS has signaled its intent to continue this trend. In addition to HHS, state attorneys general are authorized to bring civil actions seeking either injunctions or damages to the extent violation implicate the privacy of state residents.

Any failure or perceived failure by us to comply with laws, regulations, policies, legal or contractual obligations, industry standards, or regulatory guidance relating to privacy, data protection, information security, marketing or consumer communications may result in governmental investigations and enforcement actions, litigation, fines and penalties or adverse publicity, and could cause our customers and partners to lose trust in us, which could have an adverse effect on our reputation and business. We expect that there will continue to be new proposed laws, regulations and industry standards relating to privacy, data protection, marketing, consumer communications and information security in the United States, the European Union and other jurisdictions, and we cannot determine the impact such future laws, regulations and standards may have on our business. Future laws, regulations, standards and other obligations or any changed interpretation of existing laws or regulations could impair our ability to develop and market new features and maintain and grow our customer base and increase revenue. Future restrictions on the collection, use, sharing or disclosure of data or additional requirements for express or implied consent of our customers, partners or end consumers for the use and disclosure of such information could require us to incur additional costs or modify our platform, possibly in a material manner, which we may be unable to achieve in a commercially reasonable manner or at all, and which could limit our ability to develop new features. If our policies, procedures, or measures relating to privacy, data protection, information security, marketing, or customer communications fail, or are perceived as failing, to comply with laws, regulations, policies, legal obligations or industry standards, we may be subject to governmental enforcement actions, litigation, regulatory investigations, fines, penalties and negative publicity and could cause our application providers, customers and partners to lose trust in us, which could materially affect our business, operating results and financial condition.

We are currently subject to securities class-action litigation and may be subject to similar or other litigation in the future, all of which will require significant management attention, could result in significant legal expenses and may result in unfavorable outcomes, all or any of which could adversely affect our operating results, harm our reputation or otherwise negatively impact our business.

We are, and may in the future become, subject to litigation or claims arising in or outside the ordinary course of business that could negatively affect our business operations and financial condition, including securities class actions and shareholder derivative actions, both of which are typically expensive to defend. For example, we currently have securities class-action complaints pending against us and certain of our current and former directors and officers, asserting violations of federal securities laws and seeking unspecified damages. We believe these lawsuits are without merit and intend to defend these cases vigorously. For more information about these complaints, see Part I, Item 3 (Legal Proceedings) of this report.

The outcome of any litigation, regardless of its merits, is inherently uncertain. Any claims and lawsuits, and the disposition of such claims and lawsuits, could be time-consuming and expensive to resolve, divert management attention and resources, and lead to attempts on the part of other parties to pursue similar claims. Any adverse determination related to litigation could adversely affect our operating results, harm our reputation or otherwise negatively impact our business. In addition, depending on the nature and timing of any such dispute, a resolution of a legal matter could materially affect our future operating results, our cash flows or both.

If our network or computer systems are breached or unauthorized access to customer data is otherwise obtained, our platform may be perceived as insecure and we may lose existing customers or fail to attract new customers, our reputation may be damaged and we may incur significant liabilities.

Our operations involve the storage and transmission of our customers' sensitive and proprietary information. Cyber-attacks and other malicious internet-based activity continue to increase generally, and cloud-based platform providers of software and services have been targeted. Due to the COVID-19 outbreak, our employees are temporarily working remotely, which may pose additional data security risks. If any unauthorized access to or security breach or security incident impacting our platform, our networks or systems, or any systems or networks of our service providers, occurs, or is believed to have occurred, whether as a result of third-party action, employee, vendor, or contractor error, malfeasance, phishing attacks, social engineering or otherwise, such an event or perceived event could result in the loss of, or unauthorized access to or acquisition of, data or intellectual property of ourselves or our customers, loss of business, severe reputational or brand damage adversely affecting customer or investor confidence, regulatory investigations and orders, litigation or other demands, indemnity obligations, damages for contract breach, penalties for violation of applicable laws, regulations, or contractual obligations, and significant costs for remediation that may include liability for stolen assets or information and repair of system damage that may have been caused, incentives offered to customers or other business partners in an effort to maintain business relationships after a breach or other incident, and other liabilities. Additionally, any such event or perceived event could impact our reputation, harm customer confidence, hurt our sales and expansion into existing and new markets, or cause us to lose existing customers. We could be required to expend significant capital and other resources to alleviate problems caused by such actual or perceived breaches or other incidents and to remediate our systems, we could be exposed to a risk of loss, litigation or regulatory action and possible liability, and our ability to operate our business may be impaired. Additionally, actual, potential or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees and engage third-party experts and consultants.

In addition, if the security measures of our customers are compromised, even without any actual compromise of our platform or systems, or any networks or systems of our service providers, we may face negative publicity or reputational harm if customers or anyone else incorrectly attributes the blame for such security breaches or other incidents to us, our platform, our systems or networks, or those of our service providers. If customers believe that our platform does not provide adequate security for the storage of personal or other sensitive information or its transmission over the internet, our business will be harmed. Customers' concerns about security or privacy may deter them from using our platform for activities that involve personal or other sensitive information.

Our errors and omissions insurance covering certain security and privacy damages and claim expenses may not be sufficient to compensate for all liability. Although we maintain insurance for liabilities incurred as a result of some security and privacy damages, we cannot be certain that our coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results, and reputation.

Because the techniques used and vulnerabilities exploited to obtain unauthorized access or to sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or vulnerabilities or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period.

Additionally, with data security a critical competitive factor in our industry, we make public statements in our privacy policies, on our website, and elsewhere describing the security of our platform. Should any of these statements be untrue, become untrue, or be perceived to be untrue, even if through circumstances beyond our reasonable control, we may face claims, including claims of unfair or deceptive trade practices, brought by the FTC, state, local, or foreign regulators, and private litigants.

If we fail to adapt and respond effectively to rapidly changing technology, evolving industry standards and changing customer needs or requirements, our solutions may become less competitive.

Our success depends on our customers' willingness to adopt and use our platform, including on their smartphone or mobile device, as well as our ability to adapt and enhance our platform. To attract new customers and increase revenue from existing customers, we need to continue to enhance and improve our platform, to meet customer needs at prices that customers are willing to pay. Such efforts will require adding new features, expanding related applications and responding to technological advancements, which will increase our research and development costs. If we are unable to develop solutions that address customers’ needs, or enhance and improve our platform in a timely manner, we may not be able to increase or maintain market acceptance of our platform.

Further, we may make changes to our platform that customers do not find useful. We may also discontinue certain features, begin to charge for certain features that are currently free or increase fees for any features or usage of our platform. We may also face unexpected problems or challenges in connection with new applications or feature introductions. Enhancements and changes to our platform could fail to attain sufficient market acceptance for many reasons, including:

- failure to predict market demand accurately in terms of platform functionality and capability or to supply features that meets this demand in a timely fashion;
- inability to operate effectively with the technologies, systems or applications of existing or potential customers;
- defects, errors or failures;
- negative publicity about their performance or effectiveness;
- delays in releasing new enhancements and additional features to our platform to the market;
- the introduction or anticipated introduction of competing products;
- an ineffective sales force;
- poor business conditions for our end-customers, causing them to delay purchases;
- challenges with customer adoption and use of our platform on mobile devices or problems encountered in developing or supporting enhancements to our mobile applications; and
- the reluctance of customers to purchase subscriptions to software incorporating open source software.

Because our platform is designed to operate on and with a variety of systems, we will need to continuously modify and enhance our platform to keep pace with changes in technology, and we may fail to do so.

In addition, issues in the use of artificial intelligence in our platform may result in reputational harm or liability. Domo’s Mr. Roboto leverages machine learning algorithms, predictive analytics, and other artificial intelligence technologies to identify trends, anomalies and correlations, provide alerts and initiate business processes. Artificial intelligence presents risks and challenges that could affect its adoption, and therefore our business. Artificial intelligence algorithms may be flawed. Datasets may be insufficient or contain biased information. Inappropriate or controversial data practices by us or others could impair the acceptance of artificial intelligence solutions. These deficiencies could undermine the decisions, predictions, or analysis artificial intelligence applications produce, subjecting us to competitive harm, legal liability, and brand or reputational harm.

Our platform also provides real-time write-back capabilities to customer environments, including to IoT products and services. The development of the internet of things, or IoT, presents security, privacy and execution risks. Many IoT devices have limited interfaces and ability to be updated or patched. IoT solutions may collect large amounts of data, and our handling of IoT data may not satisfy customers or regulatory requirements. IoT scenarios may increasingly affect personal health and safety. If IoT solutions that include our technologies do not work as intended, violate the law, or harm individuals or businesses, we may be subject to legal claims or enforcement actions. These risks, if realized, may increase our costs, damage our reputation or brand, or negatively impact our business and operating results.

Moreover, many competitors expend a considerably greater amount of funds on their research and development programs, and those that do not may be acquired by larger companies that would allocate greater resources to competitors’ research and development programs. If we fail to maintain adequate research and development resources or compete effectively with the research and development programs of competitors, our business could be harmed. Our ability to grow is also subject to the risk of future disruptive technologies. If new technologies emerge that are able to deliver business intelligence solutions at lower prices, more efficiently, more conveniently or more securely, such technologies could adversely affect our ability to compete.

We are dependent on the continued services and performance of our senior management and other key personnel, the loss of any of whom could adversely affect our business.

Our future success depends in large part on the continued contributions of our founder and chief executive officer, other executive officers, members of senior management and other key personnel. We do not maintain “key person” insurance for any employee. Our executive officers, senior management and key personnel are all employed on an at-will basis, which means that they could terminate their employment with us at any time, for any reason and without notice. The loss of any of our key management personnel could significantly delay or prevent the achievement of our development and strategic objectives and adversely affect our business.

If we are unable to attract, integrate and retain additional qualified personnel, including top technical talent, our business could be adversely affected.

Future success depends in part on our ability to identify, attract, integrate and retain highly skilled technical, managerial, sales and other personnel. We face intense competition for qualified individuals from numerous other companies, including other software and technology companies, many of whom have greater financial and other resources than we do. These companies also may provide more diverse opportunities and better chances for career advancement. Some of these characteristics may be more appealing to high-quality candidates than those we have to offer. In addition, new hires often require significant training and, in many cases, take significant time before they achieve full productivity. We may incur significant costs to attract and retain qualified personnel, including significant expenditures related to salaries and benefits and compensation expenses related to equity awards, and we may lose new employees to competitors or other companies before we realize the benefit of our investment in recruiting and training them. Moreover, new employees may not be or become as productive as we expect, as we may face challenges in adequately or appropriately integrating them into our workforce and culture. In addition, as we move into new geographies, we will need to attract and recruit skilled personnel in those areas. We have limited experience with recruiting in geographies outside of the United States, and may face additional challenges in attracting, integrating and retaining international employees. If we are unable to attract, integrate and retain suitably qualified individuals who are capable of meeting our growing technical, operational and managerial requirements, on a timely basis or at all, our business will be adversely affected.

Volatility or lack of positive performance in our stock price may also affect our ability to attract and retain our key employees. Employees may be more likely to leave us if the shares they own or the shares underlying their vested options have significantly appreciated in value relative to the original purchase prices of the shares or the exercise prices of the options, or, conversely, if the exercise prices of the options that they hold are significantly above the market price of our common stock. If we are unable to appropriately incentivize and retain our employees through equity compensation, or if we need to increase our compensation expenses in order to appropriately incentivize and retain our employees, our business, operating results, financial condition and cash flows would be adversely affected.

If we are unable to develop and maintain successful relationships with channel partners, our business, operating results, and financial condition could be adversely affected.

To date, we have been primarily dependent on our direct sales force to sell subscriptions to our platform. Although we have developed relationships with some channel partners, such as referral partners, resellers, and integration partners, these channels have resulted in limited revenue historically. We believe that continued growth in our business is dependent upon identifying, developing, and maintaining strategic relationships with additional channel partners that can drive substantial revenue. If we fail to identify additional channel partners in a timely and cost-effective manner, or at all, or are unable to assist our current and future channel partners in independently selling and deploying our products, our business, results of operations, and financial condition could be adversely affected. Typically, agreements with channel partners are non-exclusive, meaning our channel partners may offer customers the products of several different companies, including products that compete with our platform. They may also cease marketing our platform with limited or no notice and with little or no penalty. Additionally, customer retention and expansion attributable to customers acquired through our channel partners may differ significantly from customers acquired through our direct sales efforts. If our channel partners do not effectively market and sell our products, or fail to meet the needs of our customers, our reputation and ability to grow our business may also be adversely affected.

Sales by channel partners are more likely than direct sales to involve collectability concerns. In particular sales by our channel partners into developing markets, and accordingly, variations in the mix between revenue attributable to sales by channel partners and revenue attributable to direct sales, may result in fluctuations in our operating results.

If we fail to offer high-quality professional services and support, our business and reputation may suffer.

High-quality professional services and support, including training, implementation and consulting services, are important for the successful marketing, sale and use of our platform and for the renewal of subscriptions by existing customers. Professional services may be provided by us or by a third-party partner. The importance of high-quality professional services and support will increase as we expand our business and pursue new customers. If we or our third-party partners do not provide effective ongoing support, our ability to retain and expand use of our platform and related applications to existing customers may suffer, and our reputation with existing or potential customers may be harmed.

We continue to pursue strategies to reduce the amount of professional services required for a customer to begin to use and gain value from our platform, lower the overall costs of professional service fees to our customers, and improve the gross margin of our professional services business. If we are unable to successfully accomplish these objectives, our operating results, including our profit margins, may be harmed.

Historically, a significant portion of field sales and professional services were conducted in person. Currently, as a result of the work and travel restrictions related to the ongoing coronavirus outbreak, substantially all of our sales and professional services activities are being conducted remotely. As of the date of this report, we do not yet know the extent of the negative impact on our ability to attract, serve, retain or upsell customers. Furthermore, existing and potential customers may choose to reduce or delay technology spending in response to the coronavirus outbreak, or attempt to renegotiate contracts and obtain concessions, which may materially and negatively impact our operating results, financial condition and prospects.

We may not timely and effectively scale our existing technology, including our computing architecture, to meet the performance and other requirements placed on our systems, which could increase expenditures unexpectedly and create risk of outages and other performance and quality of service issues for our customers.

Our future growth and renewal rates depend on our ability to meet customers’ expectations with respect to the speed, reliability and other performance attributes of our platform, and to meet the expanding needs of customers as their use of our platform grows. The number of users, the amount and complexity of data ingested, created, transferred, processed and stored by us, the number of locations where our platform is being accessed, and the number of processes and systems managed by us on behalf of these customers, among other factors, separately and combined, can have an effect on the performance of our platform. In order to ensure that we meet the performance and other requirements of customers, we continue to make significant investments to develop and implement new technologies in our platform and infrastructure operations. These technologies, which include database, application and server advancements, revised network and hosting strategies, and automation, are often advanced, complex, and sometimes broad in scope and untested through industry-wide usage. We may not be successful in developing or implementing these technologies. To the extent that we do not develop offerings and scale our operations in a manner that maintains performance as our customers expand their use, our business and operating results may be harmed.

We may not accurately assess the capital and operational expenditures required to successfully fulfill our objectives and our financial performance may be harmed as a result. Further, we may make mistakes in the technical execution of these efforts to improve our platform, which may affect our customers. Issues that may arise include performance, data loss or corruption, outages, and other issues that could give rise to customer satisfaction issues, loss of business, and harm to our reputation. If any of these were to occur there would be a negative and potentially significant impact to our financial performance. Lastly, our ability to generate new applications, and improve our current solutions may be limited if and to the extent resources are necessarily allocated to address issues related to the performance of existing solutions.

Real or perceived errors, failures, or bugs in our platform could adversely affect our operating results and growth prospects.

We update our platform on a frequent basis. Despite efforts to test our updates, errors, failures or bugs may not be found in our platform until after it is deployed to our customers. We have discovered and expect we will continue to discover errors, failures and bugs in our platform and anticipate that certain of these errors, failures and bugs will only be discovered and remediated after deployment to customers. Real or perceived errors, failures or bugs in our platform could result in negative publicity, government inquiries, loss of or delay in market acceptance of our platform, loss of competitive position, or claims by customers for losses sustained by them. In such an event, we may be required, or may choose, for customer relations or other reasons, to expend additional resources in order to help correct the problem.

We implement bug fixes and upgrades as part of our regular system maintenance, which may lead to system downtime. Even if we are able to implement the bug fixes and upgrades in a timely manner, any history of inaccuracies in the data we collect for our customers, or the loss, damage, unauthorized access to or acquisition of, or inadvertent release or exposure of confidential or other sensitive data could cause our reputation to be harmed and result in claims against us, and customers may elect not to purchase or renew their agreements with us or we may incur increased insurance costs. The costs associated with any material defects or errors in our software or other performance problems may be substantial and could harm our operating results.

If we fail to meet our service level commitments, our business, results of operations and financial condition could be adversely affected.

Our subscription agreements with many of our customers, including most of our top customers, provide certain service level commitments. If we are unable to meet the stated service level commitments or suffer extended periods of downtime that exceed the periods allowed under our subscription agreements, we may be obligated to provide these customers with service credits, or we could face subscription terminations, which could significantly impact our revenue. Any extended service outages could also adversely affect our reputation, which would also impact our future revenue and operating results.

Our customers depend on our customer support organization to resolve technical issues relating to our platform. We may be unable to respond quickly enough to accommodate short-term increases in customer demand for support services. Increased customer demand for these services, without corresponding revenue, could increase costs and adversely affect our operating results. In addition, our sales process is highly dependent on the ease of use of our services, on our reputation and on positive recommendations from our existing customers. Any failure to maintain high-quality customer support, or a market perception that we do not maintain high-quality support, could adversely affect our reputation and our ability to sell our services to existing and prospective customers.

Interruptions or performance problems associated with our technology and infrastructure may adversely affect our business and operating results.

Our continued growth depends in part on the ability of existing and potential customers to access our platform at any time. We have experienced, and may in the future experience, disruptions, outages, and other performance problems due to a variety of factors, including infrastructure changes, introductions of new capabilities, human or technology errors, distributed denial of service attacks, or other security related incidents. In some instances, we may not be able to identify the cause or causes of these performance problems within an acceptable period of time. It may become increasingly difficult to maintain and improve our performance, especially during peak usage times and as our platform becomes more complex and user traffic increases. If our platform is unavailable or if users are unable to access our platform within a reasonable amount of time, or at all, our business will be harmed.

We also rely on SaaS and other technologies from third parties in order to operate critical functions of our business. To the extent that our third-party service providers experience outages, disruptions, or other performance problems, or to the extent we do not effectively address capacity constraints, upgrade our systems as needed, and continually develop our technology and network architecture to accommodate actual and anticipated changes in technology, our business and operating results may be adversely affected. In addition, if our agreements with third-party software or services vendors are not renewed or the third-party software or services become obsolete, fail to function properly, are incompatible with future versions of our products or services, are defective or otherwise fail to address our needs, there is no assurance that we would be able to replace the functionality provided by the third-party software or services with software or services from alternative providers.

We have taken steps to increase redundancy in our platform and infrastructure and have plans in place to mitigate events that could disrupt our platform's service. However, there can be no assurance that these efforts would protect against interruptions or performance problems.

We rely upon data centers and other systems and technologies provided by third parties, and technology systems and electronic networks supplied and managed by third parties, to operate our business and interruptions or performance problems with these systems, technologies and networks may adversely affect our business and operating results.

We rely on data centers and other technologies and services provided by third parties in order to manage our cloud-based infrastructure and operate our business. If any of these services becomes unavailable or otherwise is unable to serve our requirements due to extended outages, interruptions, facility closure, or because it is no longer available on commercially reasonable terms, expenses could increase, our ability to manage finances could be interrupted and our operations otherwise could be disrupted or otherwise impacted until appropriate substitute services, if available, are identified, obtained, and implemented.

We do not control, or in some cases have limited control over, the operation of the data center facilities we use, and they are vulnerable to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures and similar events. They may also be subject to break-ins, sabotage, intentional acts of vandalism and similar misconduct, to adverse events caused by operator error, and to interruptions, data loss or corruption, and other performance problems due to various factors, including introductions of new capabilities, technology errors, infrastructure changes, distributed denial of service attacks, or other security related incidents. For instance, in December 2017, researchers identified significant CPU architecture vulnerabilities commonly known as “Spectre” and “Meltdown” that have required software updates and patches, including for providers of public cloud services, to mitigate such vulnerabilities and such updates and patches have required servers to be offline and potentially slow their performance. We may not be able to rapidly switch to new data centers or move customers from one data center to another in the event of any adverse event. Despite precautions taken at these facilities, the occurrence of a natural disaster, an act of terrorism or other act of malfeasance, a decision to close the facilities without adequate notice or other unanticipated problems at these facilities could result in lengthy interruptions in our service and the loss or corruption of, or unauthorized access to or acquisition of, customer data.

In addition, if we do not accurately predict our infrastructure capacity requirements, customers could experience service shortfalls. The provisioning of additional cloud hosting capacity and data center infrastructure requires lead time. As we continue to add data centers, restructure our data management plans, and increase capacity in existing and future data centers, we may be required to move or transfer our data and customers’ data. Despite precautions taken during such processes and procedures, any unsuccessful data transfers may impair customers’ use of our platform, and we may experience costs or downtime in connection with the transfer of data to other facilities, which may lead to, among other things, customer dissatisfaction and non-renewals. 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, we may be required to transfer to new data center facilities, and we may incur significant costs and possible service interruption in connection with doing so.

Our ability to provide services and solutions to customers also depends on our ability to communicate with customers through the public internet and electronic networks that are owned and operated by third parties. In addition, in order to provide services on-demand and promptly, our computer equipment and network servers must be functional 24 hours per day, which requires access to telecommunications facilities managed by third parties and the availability of electricity, which we do not control. A severe disruption of one or more of these networks or facilities, including as a result of utility or third-party system interruptions, could impair our ability to process information and provide services to our customers.

Any unavailability of, or failure to meet our requirements by, third-party data centers or other third-party technologies or services, or any disruption of the internet or the third-party networks or facilities that we rely upon, could impede our ability to provide services to customers, harm our reputation, result in a loss of customers, cause us to issue refunds or service credits to customers, subject us to potential liabilities, result in contract terminations, and adversely affect our renewal rates. Any of these circumstances could adversely affect our business and operating results.

If our or our customers' access to data becomes limited, our business, results of operations and financial condition may be adversely affected.

The success of our platform is dependent in large part on our customers’ ability to access data maintained on third party software and service platforms. Generally, we do not have agreements in place with these third parties that guarantee access to their platforms, and any agreements that we do have in place with these third parties are typically terminable for convenience by the third party. If these third parties restrict or prevent our ability to integrate our platform with their software or platform, including but not limited to, by limiting the functionality of our data connectors, our ability to access the data maintained on their systems or the speed at which such data is delivered, customers’ ability to access their relevant data in a timely manner may be limited, and our business and operating results may be adversely affected.

Our business depends on continued and unimpeded access to the internet and mobile networks.

Our customers who access our platform and services through mobile devices, such as smartphones, laptops and tablet computers, must have a high-speed internet connection to use our services. Currently, this access is provided by telecommunications companies and internet access service providers that have significant and increasing market power in the broadband and internet access marketplace. In the absence of government regulation, these providers could take measures that affect their customers’ ability to use our products and services, such as degrading the quality of the data packets we transmit over their lines, giving our packets low priority, giving other packets higher priority than ours, blocking our packets entirely, or attempting to charge their customers more for using our platform and services. To the extent that internet service providers implement usage-based pricing, including meaningful bandwidth caps, or otherwise try to monetize access to their networks, we could incur greater operating expenses and customer acquisition and retention could be negatively impacted. Furthermore, to the extent network operators were to create tiers of internet access service and either charge us for or prohibit our services from being available to our customers through these tiers, our business could be negatively impacted.

On February 26, 2015, the Federal Communications Commission, or the FCC, reclassified broadband internet access services in the United States as a telecommunications service subject to some elements of common carrier regulation, including the obligation to provide service on just and reasonable terms, and adopted specific net neutrality rules prohibiting the blocking, throttling or “paid prioritization” of content or services. However, in December 2017, the FCC once again classified broadband internet access service as an unregulated information service and repealed the specific rules against blocking, throttling or “paid prioritization” of content or services. It retained a rule requiring internet service providers to disclose their practices to consumers, entrepreneurs and the FCC. A number of parties have already stated they would appeal this order and it is possible Congress may adopt legislation restoring some net neutrality requirements. The elimination of net neutrality rules and any changes to the rules could affect the market for broadband internet access service in a way that impacts our business, for example, if internet access providers begin to limit the bandwidth and speed for the transmission of data from independent software vendors.

Catastrophic events may disrupt our business and impair our ability to provide our platform to customers, resulting in costs for remediation, customer dissatisfaction, and other business or financial losses.

Our operations depend, in part, on our ability to protect our facilities against damage or interruption from natural disasters, power or telecommunications failures, criminal acts and similar events. Despite precautions taken at our facilities, the occurrence of a natural disaster, epidemic or pandemic (such as the COVID-19 outbreak), an act of terrorism, vandalism or sabotage, spikes in usage volume or other unanticipated problems at a facility could result in lengthy interruptions in the availability of our platform. Even with current and planned disaster recovery arrangements, our business could be harmed. Also, in the event of damage or interruption, our insurance policies may not adequately compensate us for any losses that we may incur. These factors in turn could further reduce revenue, subject us to liability and cause us to issue credits or cause customers to fail to renew their subscriptions, any of which could harm our business.

Our long-term growth depends in part on being able to expand internationally on a profitable basis.

Historically, we have generated a substantial majority of our revenue from customers inside the United States. For example, approximately 82%, 77% and 75% of our total revenue for the years ended January 31, 2018, 2019 and 2020, respectively, was derived from sales within the United States. We have begun to expand internationally and plan to continue to expand our international operations as part of our growth strategy. Expanding our international operations will subject us to a variety of risks and challenges, including:

- the need to make significant investments in people, solutions and infrastructure, typically well in advance of revenue generation;

- the need to localize and adapt our application for specific countries, including translation into foreign languages and associated expenses;
- potential changes in public or customer sentiment regarding cloud-based services or the ability of non-local enterprises to provide adequate data protection, particularly in the European Union;
- technical or latency issues in delivering our platform;
- dependence on certain third parties, including resellers with whom we do not have extensive experience;
- the lack of reference customers and other marketing assets in regional markets that are new or developing for us, as well as other adaptations in our market generation efforts that we may be slow to identify and implement;
- unexpected changes in regulatory requirements, taxes or trade laws;
- differing labor regulations, especially in the European Union, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations;
- challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits and compliance programs;
- difficulties in maintaining our company culture with a dispersed and distant workforce;
- difficulties in managing a business in new markets with diverse cultures, languages, customs, legal systems, alternative dispute systems and regulatory systems;
- currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we choose to do so in the future;
- limitations on our ability to reinvest earnings from operations in one country to fund the capital needs of our operations in other countries;
- limited or insufficient intellectual property protection, or the risk that our products may conflict with, infringe or otherwise violate foreign intellectual property;
- political instability or terrorist activities;
- requirements to comply with foreign privacy, information security, and data protection laws and regulations and the risks and costs of non-compliance;
- likelihood of potential or actual violations of domestic and international anticorruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act, or of U.S. and international export control and sanctions regulations, which likelihood may increase with an increase of sales or operations in foreign jurisdictions and operations in certain industries;
- requirements to comply with U.S. export control and economic sanctions laws and regulations and other restrictions on international trade;
- likelihood that the United States and other governments and their agencies impose sanctions and embargoes on certain countries, their governments and designated parties, which may prohibit the export of certain technology, products, and services to such persons;
- adverse tax burdens and foreign exchange controls that could make it difficult to repatriate earnings and cash should we desire to do so; and
- our ability to recruit and engage local channel and implementation partners.

Any of these risks could adversely affect our international operations, reduce our international revenue or increase our operating costs, adversely affecting our business, operating results and financial condition and growth prospects.

For example, compliance with laws and regulations applicable to our international operations increases the cost of doing business in foreign jurisdictions. We may be unable to keep current with changes in government requirements as they change from time to time. Failure to comply with these regulations could have adverse effects on our business. In addition, in many foreign countries it is common for others to engage in business practices that are prohibited by our internal policies and procedures or U.S. laws and regulations applicable to us. We have not historically had formal policies with respect to these laws and regulations, and have only recently begun to implement compliance procedures designed to prevent violations of these laws and regulations. There can be no assurance that all of our employees, contractors, and agents will comply with the formal policies we will implement, or applicable laws and regulations. Violations of laws or key control policies by our employees, contractors, channel partners or agents could result in delays in revenue recognition, financial reporting misstatements, fines, penalties, or the prohibition of the importation or exportation of our software and services and could have a material adverse effect on our business and operating results.

Some of our business partners also have international operations and are subject to the risks described above. Even if we are able to successfully manage the risks of international operations, our business may be adversely affected if our business partners are not able to successfully manage these risks.

Increased sales to customers outside the United States or paid for in currency other than the U.S. dollar exposes us to potential currency exchange losses.

As our international sales and operations increase, so too will the number and significance of transactions, including intercompany transactions, occurring in currencies other than the U.S. dollar. In addition, our international subsidiaries may accumulate assets and liabilities that are denominated in currencies other than the U.S. dollar, which is the functional reporting currency of these entities. Accordingly, changes in the value of foreign currencies relative to the U.S. dollar can affect our revenue and operating results due to foreign currency gains and losses that are reflected in our earnings. We do not currently maintain a program to hedge transactional exposures in foreign currencies. However, in the future, we may use derivative instruments, such as foreign currency forward and option contracts, to hedge certain exposures to fluctuations in foreign currency exchange rates. The use of such hedging activities may not offset any or more than a portion of the adverse financial effects of unfavorable movements in foreign exchange rates over the limited time the hedges are in place. Moreover, the use of hedging instruments may introduce additional risks if we are unable to structure effective hedges with such instruments.

Future changes in the regulations and laws of the United States, or those of the international markets in which we do business, could harm our business.

We are subject to general business regulations and laws, as well as regulations and laws specifically governing the internet and software, in the United States as well as the international markets in which we do business. These regulations and laws may cover employment, taxation, privacy, data security, data protection, pricing, content, copyrights and other intellectual property, mobile communications, electronic contracts and other communications, consumer protection, unencumbered internet access to our services, the design and operation of websites, and the characteristics and quality of software and services. It is possible changes to these regulations and laws, as well as compliance challenges related to the complexity of multiple, conflicting and changing sets of applicable regulations and laws, may impact our sales, operations, and future growth.

Our business is highly dependent upon our brand recognition and reputation, and the failure to maintain or enhance our brand recognition or reputation would likely adversely affect our business and operating results.

We believe that maintaining and enhancing the Domo brand identity and our reputation are critical to our relationships with customers and channel partners and to our ability to attract new customers and channel partners. We also believe that the importance of our brand recognition and reputation will continue to increase as competition in our market continues to develop. Our success in this area will depend on a wide range of factors, some of which are beyond our control, including the following:

- the efficacy of our marketing efforts;
- our ability to maintain a high-quality, innovative and error- and bug-free platform;
- our ability to obtain new customers and retain and increase usage by existing customers;
- our ability to maintain high customer satisfaction;
- the quality and perceived value of our platform;
- our ability to obtain, maintain and enforce trademarks and other indicia of origin that are valuable to our brand;
- our ability to successfully differentiate our platform from competitors' products;

- actions of competitors and other third parties;
- our ability to provide customer support and professional services;
- any actual or perceived data breach or data loss, or misuse or perceived misuse of our platform;
- positive or negative publicity;
- interruptions, delays or attacks on our platform;
- challenges with customer adoption and use of our platform on mobile devices or problems encountered in developing or supporting enhancements to our mobile applications; and
- litigation or regulatory related developments.

If our brand promotion activities are not successful, our operating results and growth may be harmed.

Independent industry analysts often provide reviews of our platform, as well as competitors' products, and perception of our platform in the marketplace may be significantly influenced by these reviews. If these reviews are negative, or less positive as compared to those of competitors' products and services, our brand may be adversely affected.

Furthermore, negative publicity, whether or not justified, relating to events or activities attributed to us, our employees, partners or others associated with any of these parties, may tarnish our reputation and reduce the value of our brand. Damage to our reputation and loss of brand equity may reduce demand for our platform and have an adverse effect on our business, operating results and financial condition. Moreover, any attempts to rebuild our reputation and restore the value of our brand may be costly and time consuming, and such efforts may not ultimately be successful.

Contractual disputes with our customers could be costly, time-consuming and harm our reputation.

Our business is contract intensive and we are party to contracts with our customers all over the world. Our contracts can contain a variety of terms, including service levels, security obligations, indemnification and regulatory requirements. Contract terms may not always be standardized across our customers and can be subject to differing interpretations, which could result in disputes with our customers from time to time. If our customers notify us of an alleged contract breach or otherwise dispute any provision under our contracts, the resolution of such disputes in a manner adverse to our interests could negatively affect our operating results.

Additionally, if customers fail to pay us under the terms of our agreements, we may be adversely affected both from the inability to collect amounts due and the cost of enforcing the terms of our contracts, including litigation. The risk of such negative effects increases with the term length of our customer arrangements. Furthermore, some of our customers may seek bankruptcy protection or other similar relief and fail to pay amounts due to us, or pay those amounts more slowly, either of which could adversely affect our operating results, financial position and cash flow.

Third-party claims that we are infringing or otherwise violating the intellectual property rights of others, whether successful or not, could subject us to costly and time-consuming litigation or require us to obtain expensive licenses, and our business could be harmed.

The technology industry is characterized by the existence of a large number of patents, copyrights, trademarks, trade secrets and other intellectual property rights. Companies in the technology industry must often defend against litigation claims based on allegations of infringement or other violations of intellectual property rights. Third parties, including our competitors, may own patents or other intellectual property rights that cover aspects of our technology or business methods and may assert patent or other intellectual property rights against us and others in the industry. Moreover, in recent years, individuals and groups that are non-practicing entities, commonly referred to as "patent trolls," have purchased patents and other intellectual property assets for the purpose of making claims of infringement or other violation of intellectual property rights in order to extract settlements. From time to time, we have received and may receive in the future threatening letters, notices or "invitations to license," or may be the subject of claims that our technology and business operations infringe or otherwise violate the intellectual property rights of others. Responding to such claims, regardless of their merit, can be time consuming, costly to defend in litigation, divert management's attention and resources, damage our reputation and brand and cause us to incur significant expenses. Claims of intellectual property infringement or other violations of intellectual property rights might require us to stop using technology found to infringe or violate a third party's rights, redesign our platform, which could require significant effort and expense and cause delays of releases, enter into costly settlement or license agreements or pay costly damage awards, or face a temporary or permanent injunction prohibiting us from marketing or selling our platform. If we cannot or do not license the infringed or otherwise violated technology on commercially reasonable terms or at all, or substitute similar technology from another source, we could be forced to limit or stop selling our platform, we may not be able to meet our obligations to customers under our customer contracts, revenue and operating results could be adversely impacted, and we may be unable to compete effectively. Even if we are successful in defending against allegations of intellectual property infringement, litigation may be costly and may divert the time and other resources of our management. Additionally, customers may not purchase our platform if they are concerned that they may infringe or otherwise violate third-party intellectual property rights. The occurrence of any of these events may harm our business.

Indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement and other losses.

Our agreements with customers and other third parties may include indemnification provisions under which we agree to indemnify them for losses suffered or incurred as a result of claims of intellectual property infringement or other violations of intellectual property rights, damages caused by us to property or persons, or other liabilities relating to or arising from our software, services or other contractual obligations. Large indemnity payments could harm our business, results of operations and financial condition. Any dispute with a customer with respect to such obligations could have adverse effects on our relationship with that customer and other existing customers and new customers and harm our business and results of operations.

The success of our business depends in part on our ability to protect and enforce our intellectual property rights.

Our success is dependent, in part, upon protecting our proprietary technology. As of January 31, 2020, we had 111 issued U.S. patents covering our technology and 11 patent applications pending for examination in the United States. Our issued patents, and any patents issued in the future, may not provide us with any competitive advantages or may be challenged by third parties, and our patent applications may never be granted. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Even if issued, there can be no assurance that these patents will adequately protect our intellectual property, as the legal standards relating to the validity, enforceability and scope of protection of patent and other intellectual property rights are uncertain.

Any patents that are issued may subsequently be invalidated or otherwise limited, allowing other companies to develop offerings that compete with ours, which could adversely affect our competitive business position, business prospects and financial condition. In addition, issuance of a patent does not guarantee that we have a right to practice the patented invention. Patent applications in the United States are typically not published until 18 months after filing or, in some cases, not at all, and publications of discoveries in industry-related literature lag behind actual discoveries. We cannot be certain that we were the first to use the inventions claimed in our issued patents or pending patent applications or otherwise used in our platform, that we were the first to file for protection in our patent applications, or that third parties do not have blocking patents that could be used to prevent us from marketing or practicing our patented technology. Effective patent, trademark, copyright and trade secret protection may not be available to us in every country in which our platform is available. The laws of some foreign countries may not be as protective of intellectual property rights as those in the United States (in particular, some foreign jurisdictions do not permit patent protection for software), and mechanisms for enforcement of intellectual property rights may be inadequate. Additional uncertainty may result from changes to intellectual property legislation enacted in the United States, including the America Invents Act, and other national governments and from interpretations of the intellectual property laws of the United States and other countries by applicable courts and agencies. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property.

Although we generally enter into confidentiality and invention assignment agreements with our employees and consultants that have access to material confidential information and enter into confidentiality agreements with our customers and the parties with whom we have strategic relationships and business alliances, no assurance can be given that these agreements will be effective in controlling access to and distribution of our platform and propriety information or prevent reverse engineering. Further, these agreements may not prevent competitors from independently developing technologies that are substantially equivalent or superior to our platform, and we may be unable to prevent this competition.

Unauthorized use of our intellectual property may have already occurred or may occur in the future. We may be required to spend significant resources to monitor and protect our intellectual property rights. Litigation may be necessary in the future to enforce our intellectual property rights. Such litigation could be costly, time consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, 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. We may not prevail in any lawsuits that we initiate. Any litigation, whether or not resolved in our favor, could subject us to substantial costs, divert resources and the attention of management and technical personnel from our business and adversely affect our business. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation, could delay further sales or the implementation of our platform, impair the functionality of our platform, delay introductions of new features or enhancements, result in our substituting inferior or more costly technologies into our platform, or injure our reputation.

We may initiate claims or litigation against third parties for infringement or other violation of our proprietary rights or to establish the validity of our proprietary rights. Litigation also puts our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing. Additionally, we may provoke third parties to assert counterclaims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may not be commercially viable. Any litigation, whether or not it is resolved in our favor, could result in significant expense to us and divert the efforts of our technical and management personnel, which may adversely affect our business, operating results, financial condition and cash flows.

Incorrect or improper implementation or use of our platform could result in customer dissatisfaction and negatively affect our business, results of operations, financial condition, and growth prospects.

Our platform is deployed in a wide variety of technology environments. Increasingly, our platform has been deployed in large scale, complex technology environments, and we believe our future success will depend on our ability to increase sales of our platform for use in such deployments. We must often assist our customers in achieving successful implementations of our platform, which we do through our professional services organization. The time required to implement our platform can vary. For complex deployments, implementation can take multiple months. If our customers are unable to implement our platform successfully, or unable to do so in a timely manner, customer perceptions of our platform may be harmed, our reputation and brand may suffer, and customers may choose to cease usage of our platform or not expand their use of our platform. Our customers and third-party partners may need training in the proper use of and the variety of benefits that can be derived from our platform to maximize its benefits. If our platform is not effectively implemented or used correctly or as intended, or if we fail to adequately train customers on how to efficiently and effectively use our platform, our customers may not be able to achieve satisfactory outcomes. This could result in negative publicity and legal claims against us, which may cause us to generate fewer sales to new customers and reductions in renewals or expansions of the use of our platform with existing customers, any of which would harm our business and results of operations.

Our use of "open source" software could negatively affect our ability to offer our platform and subject us to possible litigation.

Our platform uses "open source" software that we, in some cases, have obtained from third parties. Open source software is generally freely accessible, usable and modifiable, and is made available to the general public on an "as-is" basis under the terms of a non-negotiable license. Use and distribution of open source software may entail greater risks than use of third-party commercial software. Open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or other claims relating to violation of intellectual property rights or the quality of the software. In addition, certain open source licenses, like the GNU Affero General Public License, or AGPL, may require us to offer for no cost the components of our platform that incorporate the open source software, to make available source code for modifications or derivative works we create by incorporating or using the open source software, or to license our modifications or derivative works under the terms of the particular open source license. If we are required, under the terms of an open source license, to release our proprietary source code to the public, competitors could create similar products with lower development effort and time, which ultimately could result in a loss of sales for us.

We may also face claims alleging noncompliance with open source license terms or infringement, misappropriation or other violation of open source technology. These claims could result in litigation or require us to purchase a costly license, devote additional research and development resources to re-engineer our platform, discontinue the sale of our products if re-engineering could not be accomplished on a timely or cost-effective basis, or make generally available our proprietary code in source code form, any of which would have a negative effect on our business and operating results, including being enjoined from the offering of the components of our platform that contained the open source software. We could also be subject to lawsuits by parties claiming ownership of what we believe to be open source software. Litigation could be costly for us to defend, have a negative effect on our operating results and financial condition and require us to devote additional research and development resources to re-engineer our platform.

Although we monitor our use of open source software and try to ensure that none is used in a manner that would subject our platform to unintended conditions, few courts have interpreted open source licenses, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our platform. We cannot guarantee that we have incorporated open source software in our platform in a manner that will not subject us to liability, or in a manner that is consistent with our current policies and procedures.

Future acquisitions could disrupt our business and adversely affect our operating results, financial condition and cash flows.

We may make acquisitions that could be material to our business, operating results, financial condition and cash flows. Our ability as an organization to successfully acquire and integrate technologies or businesses is unproven. Acquisitions involve many risks, including the following:

- an acquisition may negatively affect our operating results, financial condition or cash flows because it may require us to incur charges or assume substantial debt or other liabilities, may cause adverse tax consequences or unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims and disputes, or may not generate sufficient financial return to offset additional costs and expenses related to the acquisition;

- we may encounter difficulties or unforeseen expenditures in integrating the business, technologies, products, personnel or operations of any company that we acquire, particularly if key personnel of the acquired company decide not to work for us;

- an acquisition may disrupt our ongoing business, divert resources, increase our expenses and distract our management;

- an acquisition may result in a delay or reduction of customer purchases for both us and the company we acquired due to customer uncertainty about continuity and effectiveness of service from either company;

- we may encounter difficulties in, or may be unable to, successfully sell any acquired products;

- an acquisition may involve the entry into geographic or business markets in which we have little or no prior experience or where competitors have stronger market positions;

- the potential strain on our financial and managerial controls and reporting systems and procedures;

- potential known and unknown liabilities associated with an acquired company;

- if we incur debt to fund such acquisitions, such debt may subject us to material restrictions on our ability to conduct our business as well as financial maintenance covenants;

- the risk of impairment charges related to potential write-downs of acquired assets or goodwill in future acquisitions;

- to the extent that we issue a significant amount of equity or convertible debt securities in connection with future acquisitions, existing stockholders may be diluted and earnings per share may decrease; and

- managing the varying intellectual property protection strategies and other activities of an acquired company.

We may not succeed in addressing these or other risks or any other problems encountered in connection with the integration of any acquired business. The inability to integrate successfully the business, technologies, products, personnel or operations of any acquired business, or any significant delay in achieving integration, could have a material adverse effect on our business, operating results, financial condition and cash flows.

Our credit facility contains restrictive covenants that may limit our operating flexibility.

Our credit facility contains restrictive covenants that limit our ability to transfer or dispose of assets, merge with other companies or consummate certain changes of control, acquire other companies, open new offices that contain a material amount of assets, pay dividends, incur additional indebtedness and liens and enter into new businesses. We therefore may not be able to engage in any of the foregoing transactions unless we obtain the consent of the lender or terminate the credit facility, which may limit our operating flexibility. In addition, our credit facility is secured by all of our assets, including our intellectual property, and requires us to satisfy certain financial covenants. There is no guarantee that we will be able to generate sufficient cash flow or sales to meet these financial covenants or pay the principal and interest on any such debt. Furthermore, there is no guarantee that future working capital, borrowings or equity financing will be available to repay or refinance any such debt. Any inability to make scheduled payments or meet the financial covenants on our credit facility would adversely affect our business.

Governmental export or import controls could limit our ability to compete in foreign markets and subject us to liability if we violate them.

Our software is subject to U.S. export controls, and we incorporate encryption technology into our platform. These products and the underlying technology may be exported only with the required export authorizations, including by license, a license exception or other appropriate government authorizations. U.S. export controls may require submission of a product classification and annual or semi-annual reports. Governmental regulation of encryption technology and regulation of imports or exports of encryption products, or our failure to obtain required import or export authorization for our platform, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our platform, including with respect to new releases of our platform, may create delays in the introduction of our product releases in international markets, prevent customers with international operations from deploying our platform or, in some cases, prevent the export of our platform to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, we may be fined or other penalties could be imposed, including a denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons or technologies targeted by such regulations, could result in decreased use of our platform by, or in our decreased ability to export or sell subscriptions to our platform to, existing or potential customers with international operations. Any decreased use of our platform or limitation on our ability to export or sell subscriptions to our platform would likely adversely affect our business, financial condition and operating results.

Failure to comply with anti-bribery, anti-corruption, and anti-money laundering laws could subject us to penalties and other adverse consequences.

We are subject to the Foreign Corrupt Practices Act, or FCPA, the U.K. Bribery Act and other anti-corruption, anti-bribery and anti-money laundering laws in various jurisdictions both domestic and abroad. Anti-corruption, anti-bribery, and anti-money laundering laws have been enforced aggressively in recent years and are interpreted broadly and generally prohibit companies and their directors, officers, employees and agents from promising, authorizing, making or offering improper payments or other benefits to government officials and others in the private sector. Such laws apply to our agents/third parties, and we leverage third parties, including channel partners, to sell subscriptions to our platform and conduct our business abroad. We and our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, channel partners, and agents, even if we do not explicitly authorize such activities. While we have policies and procedures to address compliance with such laws, these policies and procedures were only recently adopted and we cannot assure you that all of our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. Any violation of the FCPA or other applicable anti-bribery, anti-corruption laws, and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions, a significant diversion of management's resources and attention or suspension or debarment from U.S. government contracts, all of which may have a material adverse effect on our reputation, business, operating results and prospects.

We may be subject to additional obligations to collect and remit sales tax and other taxes, and we may be subject to tax liability for past transactions, which could harm our business.

We do not collect sales and use, value added and similar taxes in all jurisdictions in which we have sales, based on our belief that such taxes are not applicable in certain jurisdictions. State, local and foreign jurisdictions have differing rules and regulations governing sales, use, value added and other taxes, and these rules and regulations are subject to varying interpretations that may change over time. In particular, the applicability of such taxes on subscriptions to our platform in various jurisdictions is unclear. Further, these jurisdictions’ rules regarding tax nexus are complex and vary significantly. As a result, we could face the possibility of audits that could result in tax assessments, including associated interest and penalties. A successful assertion that we should be collecting additional sales, use, value added or other taxes in those jurisdictions where we have not historically done so could result in substantial tax liabilities and related penalties for past transactions, discourage customers from purchasing our application or otherwise harm our business and operating results.

Changes in tax laws or regulations that are applied adversely to us or our customers could increase the costs of our platform and adversely impact our business.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could affect the tax treatment of our (and our subsidiaries’) domestic and foreign financial results. Any new taxes could adversely affect our domestic and international business operations, and our business and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. Specifically, taxation of cloud-based software is constantly evolving as many state and local jurisdictions consider the taxability of software services provided remotely. These events could require us or our customers to pay additional tax amounts on a prospective or retroactive basis, as well as require us or our customers to pay fines or penalties and interest for past amounts deemed to be due. If we raise our prices to offset the costs of these changes, existing and potential future customers may elect not to continue to use or purchase subscriptions to our platform in the future. Additionally, new, changed, modified or newly interpreted or applied tax laws could increase our customers' and our compliance, operating and other costs, as well as the costs of our platform. Any or all of these events could harm our business and operating results.

Further, the recently enacted Tax Cuts and Jobs Act has brought about a wide variety of changes to the U.S. tax system, particularly at the corporate level. The new tax law included changes to the U.S. corporate tax system that reduced U.S. corporate tax rates, changed how U.S. multinational corporations, like us, are taxed on international earnings and eliminated in whole or in part the deduction for net interest expense. The primary impact of the new legislation on our provision for income taxes was a reduction of the future tax benefits of existing temporary differences, which are primarily comprised of net operating loss carryforwards. Since we have recorded a full valuation allowance against our deferred tax assets, these changes have not had a material impact on our consolidated financial statements, but we will continue to examine the impact that this tax reform legislation may have on our business. The impact of the new legislation will likely be subject to ongoing technical guidance and accounting interpretation, which we will continue to monitor and assess.

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

As a multinational organization, we are subject to taxation in several jurisdictions around the world with increasingly complex tax laws, the application of which can be uncertain, and significant judgment and estimates are required in determining our provision for income taxes. Our tax expense may be impacted if our intercompany transactions, which are required to be computed on an arm's-length basis, are challenged and successfully disputed by tax authorities. Our policies governing transfer pricing may be determined to be inadequate and could result in additional tax assessments. The amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws or revised interpretations of existing tax laws and precedents, which could harm our liquidity and operating results. In addition, the authorities in these jurisdictions could review our tax returns and impose additional tax, interest and penalties, and the authorities could claim that various withholding requirements or other taxes apply to us or our subsidiaries or assert that benefits of tax treaties are not available to us or our subsidiaries, any of which could adversely affect our operating results.

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

As of January 31, 2020, we had net operating loss, or NOL, carryforwards for federal and state income tax purposes of approximately $914.8 million and $1,141.0 million, respectively, which may be available to offset taxable income in the future, and which expire in various years beginning in 2028 for federal purposes if not utilized. The state NOLs will expire depending upon the various rules in the states in which we operate. A lack of future taxable income would adversely affect our ability to utilize these NOLs before they expire. In general, under Section 382 of the Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an "ownership change" (as defined under Section 382 of the Code and applicable Treasury Regulations) is subject to limitations on its ability to utilize its pre-change NOLs to offset our future taxable income. We may experience a future ownership change under Section 382 of the Code that could affect our ability to utilize the NOLs to offset our income. Furthermore, our ability to utilize NOLs 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 regulatory changes, such as suspensions on the use of NOLs or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to reduce future income tax liabilities, including for state tax purposes. For these reasons, we may not be able to utilize a material portion of the NOLs, even if we attain profitability, which could potentially result in increased future tax liability to us and could adversely affect our operating results and financial condition.

Our reported financial results may be harmed by changes in the accounting principles generally accepted in the United States.

Generally accepted accounting principles in the United States are subject to interpretation by the Financial Accounting Standards Board, or FASB, the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results, and may even affect the reporting of transactions completed before the announcement or effectiveness of a change. Other companies in our industry may apply these accounting principles differently than we do, adversely affecting the comparability of our financial statements.

Risks Relating to Our Class B Common Stock

The dual class structure of our common stock has the effect of concentrating voting control with our founder and chief executive officer, which will limit your ability to influence the outcome of important transactions, including a change in control.

Our Class A common stock has 40 votes per share, and our Class B common stock has one vote per share. Cocolalla, LLC holds all of the shares of the Class A common stock, and our founder and chief executive officer Joshua G. James, who is the managing member of Cocolalla, LLC, controls approximately 84% of the voting power of our outstanding capital stock and therefore is able to control all matters submitted to our stockholders for approval. Our founder and chief executive officer may have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. This concentrated control may have the effect of delaying, preventing or deterring a change in control of our company, could deprive our stockholders of an opportunity to receive a premium for their capital stock as part of a sale of our company and might ultimately affect the market price of our Class B common stock.

Future transfers by the holder of Class A common stock will generally result in those shares converting into shares of Class B common stock, subject to limited exceptions, such as certain transfers effected for estate planning or charitable purposes. Mr. James has informed us he and Cocolalla, LLC have entered into arrangements under which he has pledged all of such shares to secure a loan with a financial institution. If these shares were to be sold or otherwise transferred upon default of the underlying loan, the market price of our Class B common stock could decline or be volatile. For additional information, see the section of this report captioned “Risk Factors - Future sales of our Class B common stock in the public market could cause our stock price to fall.”

We have elected to take advantage of the “controlled company” exemption to the corporate governance rules of The Nasdaq Stock Market, which could make our common stock less attractive to some investors or otherwise harm our stock price.

Because we qualify as a “controlled company” under the corporate governance rules of The Nasdaq Stock Market, we are not required to have a majority of our board of directors be independent, nor are we required to have an entirely independent compensation committee or an independent nominating function. Accordingly, should the interests of Cocolalla, LLC, or of our founder and chief executive officer, who controls Cocolalla, LLC, differ from those of other stockholders, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules of The Nasdaq Stock Market. Our status as a controlled company could make our common stock less attractive to some investors or otherwise harm our stock price.

We cannot predict the impact our dual class structure may have on our stock price or our business.

We cannot predict whether our dual class structure, combined with the concentrated control of our stockholders who held our capital stock prior to the completion of our initial public offering, including our executive officers, employees and directors and their affiliates, will result in a lower or more volatile market price of our Class B common stock or in adverse publicity or other adverse consequences. For example, certain index providers have announced restrictions on including companies with multiple-class share structures in certain of their indexes. In July 2017, FTSE Russell announced that it plans to require new constituents of its indexes to have greater than 5% of the company's voting rights in the hands of public stockholders, and S&P Dow Jones announced that it will no longer admit companies with multiple-class share structures to certain of its indexes. Because of our dual class structure, we will likely be excluded from these indexes and we cannot assure you that other stock indexes will not take similar actions. Given the sustained flow of investment funds into passive strategies that seek to track certain indexes, exclusion from stock indexes would likely preclude investment by many of these funds and could make our Class B common stock less attractive to other investors. As a result, the market price of our Class B common stock could be adversely affected.

The market price of our Class B common stock may be volatile, and the value of your investment could decline significantly.

The trading price of our Class B common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control. The following factors, in addition to other risks described in this report, may have a significant effect on our Class B common stock price:

- actual or anticipated fluctuations in revenue and other operating results, including as a result of the addition or loss of any number of customers;

- announcements by us or competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures or capital commitments;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- failure of securities analysts to initiate or maintain coverage of us, changes in ratings, key metrics and financial estimates and the publication of other news by any securities analysts who follow our company, or our failure to meet these analyst estimates or the expectations of investors;
- changes in operating performance and stock market valuations of cloud-based software or other technology companies, or those in our industry in particular;
- the size of our public float;
- price and volume fluctuations in the trading of our Class B common stock and in the overall stock market, including as a result of trends in the economy as a whole or in the technology industry;
- the impact of the coronavirus outbreak, including on the global economy, our results of operations, enterprise software spending and business continuity;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business or industry, including those relating to data privacy and data security;
- lawsuits threatened or filed against us for claims relating to intellectual property, employment issues or otherwise;
- actual or perceived data breach or data loss, misuse or perceived misuse of our platform;
- changes in our board of directors or management;
- short sales, hedging and other derivative transactions involving our Class B common stock;
- sales of large blocks of our common stock including sales by our executive officers, directors and significant stockholders; and
- other events or factors, including changes in general economic, industry and market conditions and trends, as well as any natural disasters that may affect our operations.

In addition, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry factors may seriously affect our stock price, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following our initial public offering. In addition, in the past, securities class action litigation has often been instituted against companies whose stock prices have declined, especially following periods of volatility in the overall market. This litigation, if instituted against us, could result in substantial costs and a diversion of our management's attention and resources.

If securities or industry analysts do not publish research reports about our business, or if they issue an adverse opinion about our business, our stock price and trading volume could decline.

The trading market for our Class B common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Future sales of our Class B common stock in the public market could cause our stock price to fall.

Our stock price could decline as a result of sales of a large number of shares after our initial public offering or the perception that these sales could occur. These sales, or the possibility that these sales may occur, also might make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate.

As of January 31, 2020, 24,985,698 shares of our Class B common stock were outstanding. All shares of our Class B common stock sold in our initial public offering are freely tradable without restriction or further registration under the Securities Act unless held by our "affiliates," as that term is defined in Rule 144 under the Securities Act. The shares of Class B common stock subject to outstanding options and warrants, of which 1,687,606 and 128,333 were exercisable as of January 31, 2020, respectively, and the shares reserved for future issuance under our equity incentive plans will become available for sale immediately upon the exercise of such options, subject to applicable securities law restrictions. Additionally, "sell-to-cover" transactions are utilized in connection with the vesting and settlement of restricted stock units so that shares of our common stock are sold on behalf of our employees in an amount sufficient to cover the tax withholding obligations associated with these awards. As a result of these transactions, a significant number of shares of our stock may be sold over a limited time period in connection with significant vesting events. In June 2020, for example, approximately 447,187 restricted stock units are scheduled to vest and settle, which may increase the volume of our shares that would otherwise be sold during this time. On June 29, 2018, we registered the offer and sale of all shares of common stock that we may issue under our equity compensation plans. As a consequence, the sale of shares to be issued under our equity incentive plans can be freely sold in the public market upon issuance, subject to the lockup agreements and the restrictions of Rule 144 under the Securities Act.

The holders of 14,098,937 shares, or approximately 50%, of our Class A and Class B common stock as of January 31, 2020 have rights, subject to some conditions, to require us to file registration statements covering the sale of their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. Once we register the offer and sale of shares for the holders of registration rights, they can be freely sold in the public market upon issuance, subject to the lock-up agreements and the restrictions of Rule 144 under the Securities Act, in the case of our affiliates.

As of January 31, 2020, Cocolalla, LLC, an entity controlled by Mr. James, owned 3,263,659 shares of our Class A common stock and Mr. James owned 163,131 shares of Class B common stock. Collectively, these shares represent approximately 84% of the voting power of our company. These shares are eligible for resale into the public market within the restrictions imposed by Rule 144 under the Securities Act. Sales of a significant amount of these shares could adversely affect the market price for our Class B common stock. Mr. James has informed us he and Cocolalla, LLC have entered into an arrangement under which he has pledged all of such shares to secure a loan with a financial institution, which Mr. James believes represents a convenient financial instrument. Mr. James has also indicated this loan has or will have various requirements to repay all or a portion of the loan upon the occurrence of various events, including when the price of the Class B common stock goes below certain specified levels. Mr. James has indicated that (1) he has substantial assets other than shares of our common stock and (2) if repayment of the loan is triggered there is a cure period to sell assets or restructure the loan. Although Mr. James has indicated his intention to sell other assets if necessary, shares of our common stock may need to be sold to meet these repayment requirements. Upon a default under such loan following any applicable cure period, the lender could sell the pledged shares into the market without limitation on volume or manner of sale. Sales of such shares to reduce the loan balance or by the lender upon foreclosure are likely to adversely affect our stock price. Mr. James has also indicated to us that he may in the future from time to time refinance such indebtedness, enter into derivative transactions based on the value of our Class B common stock, dispose of shares of common stock, otherwise monetize shares of his common stock and/or engage in other transactions relating to shares of our common stock and/or other securities of the company. Any of these activities may adversely affect the price of our common stock. Mr. James has also indicated that he intends to (1) continue to beneficially own a majority of the Class A common stock that he currently beneficially owns and (2) continue to control at least a majority of the voting power of our company.

In addition, in the future, we may issue additional shares of Class B common stock or other equity or debt securities convertible into common stock in connection with a financing, acquisition, litigation settlement, employee arrangement or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and could cause our stock price to decline.

An active trading market for our Class B common stock may not develop.

Prior to our initial public offering, there was no public market for our Class B common stock, and an active trading market for our shares may not be sustained following our initial public offering. In addition, we may have one or more stockholders who continue to hold substantial blocks of our Class B common stock for sustained periods. As a result, the trading volume of our stock may be low relative to our total outstanding shares. As a result of these and other factors, you may be unable to resell your shares of our Class B common stock at a price that you consider reasonable.

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

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. These provisions include the following:

- our dual-class common stock structure, which provides our holders of Class A common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding Class A common stock and Class B common stock;
- when the outstanding shares of Class A common stock represent less than a majority of the total combined voting power of our Class A and Class B common stock, or the voting threshold date, our board of directors will be classified into three classes of directors with staggered three-year terms, and directors will only be able to be removed from office for cause;
- our amended and restated bylaws provide that, following the voting threshold date, approval of stockholders holding two-thirds of our outstanding voting power voting as a single class will be required for stockholders to amend or adopt any provision of our bylaws;
- our stockholders are able to take action by written consent for any matter until the voting threshold date;
- following the voting threshold date, vacancies on our board of directors will be able to be filled only by our board of directors and not by stockholders;
- only the chairman of our board of directors, chief executive officer, a majority of our board of directors or, until the voting threshold date, a stockholder (or group of stockholders) holding at least 50% of the combined voting power of our Class A and Class B common stock are authorized to call a special meeting of stockholders;
- certain litigation against us can only be brought in Delaware;
- our restated certificate of incorporation authorizes undesignated preferred stock, the terms of which may be established and shares of which may be issued, without the approval of the holders of common stock; and
- advance notice procedures apply for stockholders to nominate candidates for election as directors or to bring matters before an annual meeting of stockholders.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibits a Delaware corporation from engaging in any of a broad range of business combinations with any “interested” stockholder for a period of three years following the date on which the stockholder became an “interested” stockholder. See “Description of Capital Stock.”

Our amended and restated bylaws designate a state or federal court located within the State of Delaware as the exclusive forum for substantially all disputes between us and our stockholders, which could limit our stockholders’ ability to choose the judicial forum for disputes with us or our directors, officers, or employees.

Our amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (3) any action arising pursuant to any provision of the Delaware General Corporation Law, or the certificate of incorporation or the amended and restated bylaws or (4) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants.

Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to this provision. This exclusive-forum provision may limit a stockholder’s ability to bring a claim in a judicial forum of its choosing for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers, and other employees. If a court were to find this exclusive-forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could harm our results of operations.

Our amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. On December 19, 2018, the Delaware Court of Chancery issued a decision in *Sciabacucchi v. Salzberg et al.*, C.A. No. 2017-0931-JTL (Del. Ch.), finding that provisions such as our federal forum provision are not valid under Delaware law. Following this decision, on January 7, 2019, we issued a Current Report on Form 8-K stating that we did not intend to enforce the federal forum provision unless the *Sciabacucchi* decision was appealed and the Delaware Supreme Court reversed the decision. On March 18, 2020, the Delaware Supreme Court issued its decision in *Salzburg et al. v. Sciabacucchi*, No. 346, 2019 (Del.), which reversed the Delaware Court of Chancery's decision. The Delaware Supreme Court found that provisions such as our federal forum provision are facially valid under Delaware law. In light of this decision finally resolving the facial validity of such provisions, we intend to enforce the federal forum provision in our amended and restated bylaws.

As an emerging growth company within the meaning of the Securities Act, we will use certain modified disclosure requirements, and we cannot be certain if these reduced requirements will make our Class B common stock less attractive to investors.

We are an emerging growth company, and for as long as we continue to be an emerging growth company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to “emerging growth companies” including:

- not being required to have our independent registered public accounting firm audit our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act;
- reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We have used and currently intend to continue to use the modified disclosure requirements available to emerging growth companies. As a result, our stockholders may not have access to certain information they may deem important.

In addition, Section 107 of the JOBS Act also provides that an emerging growth company can use the extended transition period provided in Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Thus, an emerging growth company can delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use this extended transition period under the JOBS Act. As a result, our consolidated financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make our Class B common stock less attractive to investors.

We could remain an “emerging growth company” for up to five years following the first sale of our common stock pursuant to an effective registration statement under the Securities Act, or until the earliest of:

- the last day of the first fiscal year in which our annual gross revenue exceeds $1.07 billion;
- the date that we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or Exchange Act, which would occur if the market value of our Class B common stock that is held by non-affiliates exceeds $700 million as of the last business day of our most recently completed second fiscal quarter; or
- the date on which we have issued more than $1 billion in non-convertible debt during the preceding three-year period.

We have incurred and will continue to incur increased costs by being a public company, including costs to maintain adequate internal control over our financial and management systems.

As a public company, we have incurred and will continue to incur significant legal, accounting and other expenses that we did not incur as a private company, including costs associated with public company reporting requirements. We have incurred and will continue to incur costs associated with corporate governance requirements, including requirements of the SEC and The Nasdaq Stock Market. We expect these rules and regulations to increase our legal and financial compliance costs and to make some activities more time-consuming and costly. We also expect these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. As a result, we may have more difficulty attracting and retaining qualified individuals to serve on our board of directors or as executive officers. We are currently evaluating and monitoring developments with respect to these rules, and we cannot predict or estimate the additional costs we may incur or the timing of such costs.

The Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting annually and the effectiveness of our disclosure controls and procedures quarterly. In particular, Section 404 of the Sarbanes-Oxley Act, or Section 404, requires us to perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on, and our independent registered public accounting firm potentially to attest to, the effectiveness of our internal controls over financial reporting. We expect to avail ourselves of the exemption from the requirement that our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting under Section 404. However, we may no longer avail ourselves of this exemption when we cease to be an "emerging growth company," and we would expect to incur significant expenses and devote substantial management effort toward ensuring compliance with the auditor attestation requirements of Section 404. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of our compliance with Section 404 will correspondingly increase. Moreover, if we are not able to comply with the requirements of Section 404 applicable to us in a timely manner, or if we or our independent registered public accounting firm identifies deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our headquarters is located in American Fork, Utah. Our current facility has approximately 122,000 square feet under a lease that expires in April 2022. We also lease space in various locations throughout the United States for sales and professional services personnel. Our foreign subsidiaries lease office space for their operations and sales and professional services personnel.

We believe the facilities we lease are sufficient to meet our needs for the immediate future.

Item 3. Legal Proceedings

In October 2019, a securities class action complaint captioned Patton v. Domo, Inc., et. al, Case No. 2:19-cv-00781-DAK-EJF, was filed by a stockholder of the Company in the U.S. District Court for the District of Utah against the Company and certain of the Company's current and former officers and directors alleging violations of securities laws and seeking unspecified damages. The Company believes this lawsuit is without merit and intends to defend the case vigorously.

In November 2019, a securities class action complaint captioned Volonte v. Domo, Inc., et. al, Case No. 19-04-01778, was filed by a stockholder of the Company in the Fourth Judicial District Court for the County of Utah in the State of Utah against the Company, certain of the Company's current and former officers and directors, and the underwriters of the Company's June 2018 initial public offering alleging violations of securities laws and seeking unspecified damages. The Company believes this lawsuit is also without merit and intends to defend the case vigorously. In January 2020, the defendants filed a motion to stay the *Volonte* action in favor of the *Patton* action. The motion has been fully briefed and is set for hearing on April 23, 2020.

The Company is unable to estimate a range of loss, if any, that could result were there to be an adverse final decision in either or both of these cases. If an unfavorable outcome were to occur, it is possible that the impact could be material to the Company's results of operations in the period(s) in which any such outcome becomes probable and estimable.

The Company is involved in other legal proceedings from time to time arising in the normal course of business. Management believes that the outcome of these proceedings will not have a material impact on the Company's financial condition, results of operations, or liquidity.

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 Information for Our Class B Common Stock

Our Class B common stock began trading on the Nasdaq Global Market under the symbol “DOMO” on June 29, 2018. Prior to that date, there was no public trading market for our Class B common stock. Our Class A common stock is not listed or traded on any stock exchange.

Holders of Record

As of January 31, 2020, there was one holder of record of our Class A common stock and 174 holders of record of our Class B common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We do not intend to pay cash dividends in the foreseeable future.

Securities Authorized for Issuance under Equity Compensation Plans

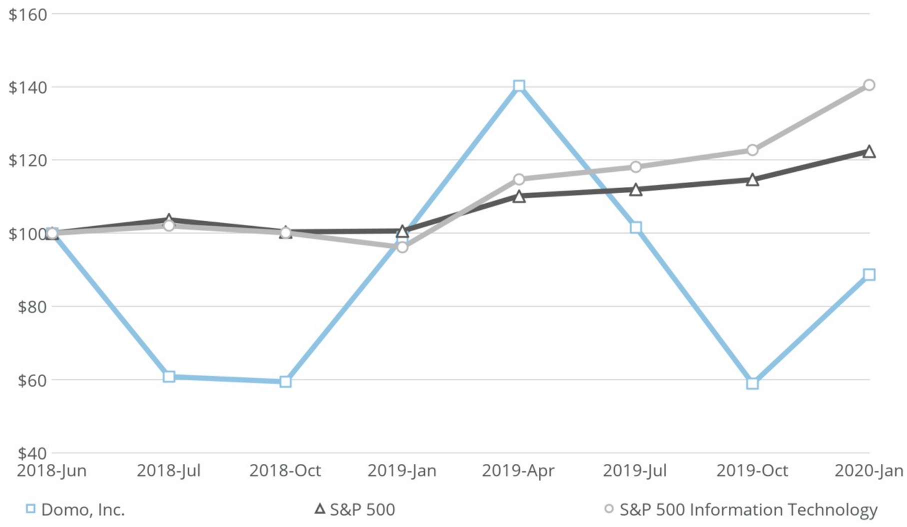
The information required by this item with respect to our equity compensation plans is incorporated by reference in our Proxy Statement for the 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days of the fiscal year ended January 31, 2020.

Stock Performance Graph

The following performance graph and related information is "furnished" and shall not be deemed to be "soliciting material" or "filed" for purposes of Section 18 of the Exchange Act and Regulation 14A under the Exchange Act nor shall such information be incorporated by reference into any filing of Domo, Inc. under the Exchange Act or the Securities Act, except to the extent we specifically incorporate it by reference in such filing.

The graph set forth below compares the cumulative total return to stockholders on our Class B common stock relative to the cumulative total returns of the Standard & Poor’s 500 Index, or the S&P 500, and the S&P 500 Information Technology Index between June 29, 2018 (the date our Class B common stock commenced trading) through January 31, 2020. All values assume a $100 initial investment at market close on June 29, 2018. The initial public offering price of our Class B common stock, which had a closing stock price of $27.30 on June 29, 2018, was $21.00 per share. Data for the S&P 500 and the S&P 500 Information Technology Index assume reinvestment of dividends. The comparisons are based on historical data and are not indicative of, nor intended to forecast, the future performance of our Class B common stock.

Comparison of Cumulative Total Return



Company/Index	Jun 29, 2018 [1]	Jul 31, 2018	Oct 31, 2018	Jan 31, 2019	Apr 30, 2019	Jul 31, 2019	Oct 31, 2019	Jan 31, 2020
Domo, Inc.	$ 100	$ 61	$ 59	$ 99	$ 140	$ 102	$ 59	$ 89
S&P 500	100	104	100	99	110	112	115	122
S&P 500 Information Technology	100	102	100	95	115	118	123	141

(1) Base period

Unregistered Sales of Equity Securities and Use of Proceeds

Unregistered Sales of Equity Securities

None.

Use of Proceeds

On June 28, 2018, the SEC declared effective our registration statement on Form S-1 (No. 333-225348) for our initial public offering. There has been no material change in the planned use of proceeds from our initial public offering as described in the final prospectus, dated June 28, 2018 and filed with the SEC pursuant to Rule 424(b)(4) under the Securities Act, relating to our initial public offering. Pending the uses described in the final prospectus, we have invested the net proceeds in capital-preservation investments, including short-term interest-bearing investment-grade securities, certificates of deposit and U.S. government backed securities, consistent with our board-approved investment policy.

Issuer Purchases of Equity Securities

None.

Item 6. Selected Consolidated Financial Data

The following selected consolidated financial data should be read in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and the consolidated financial statements and related notes included within this Annual Report on Form 10-K. The consolidated statement of operations data for the fiscal years ended January 31, 2018, 2019 and 2020 and the consolidated balance sheet data as of January 31, 2019 and 2020 are derived from our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. The consolidated statement of operations data for the fiscal year ended January 31, 2017 and the consolidated balance sheet data as of January 31, 2017 and 2018 are derived from our audited consolidated financial statements not included in this Annual Report on Form 10-K.

Our historical results are not necessarily indicative of our future results. The selected consolidated financial data in this section are not intended to replace our consolidated financial statements and the related notes, and are qualified in their entirety by the consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

Consolidated Statements of Operations Data

	Year Ended January 31,			
	2017	2018	2019	2020
	(in thousands)			
Revenue:				
Subscription	$ 58,664	$ 87,463	$ 117,157	$ 146,837
Professional services and other	15,876	21,061	25,307	26,558
Total revenue	74,540	108,524	142,464	173,395
Cost of revenue:				
Subscription[(1)]	21,486	32,427	32,781	35,366
Professional services and other[(1)]	11,709	12,492	16,773	20,564
Total cost of revenue	33,195	44,919	49,554	55,930
Gross profit	41,345	63,605	92,910	117,465
Operating expenses:				
Sales and marketing[(1)]	118,935	131,802	131,081	127,567
Research and development[(1)]	76,164	78,261	75,740	69,224
General and administrative[(1)(2)(3)]	29,106	29,323	30,176	35,941
Total operating expenses	224,205	239,386	236,997	232,732
Loss from operations	(182,860)	(175,781)	(144,087)	(115,267)
Other income (expense), net[(1)]	513	(396)	(8,974)	(9,635)
Loss before income taxes	(182,347)	(176,177)	(153,061)	(124,902)
Provision for income taxes	773	385	1,248	754
Net loss	$ (183,120)	$ (176,562)	$ (154,309)	$ (125,656)
Net loss per share, basic and diluted	$ (124.90)	$ (110.70)	$ (9.43)	$ (4.57)
Weighted-average number of shares used in computing net loss per share, basic and diluted	1,466	1,595	16,358	27,520

(1) Includes stock-based compensation expense as follows:

	Year Ended January 31,			
	2017	2018	2019	2020
	(in thousands)			
Cost of revenue:				
Subscription	$ 46	$ 48	$ 219	$ 507
Professional services and other	45	40	154	404
Sales and marketing	1,930	1,845	7,387	10,770
Research and development	2,206	2,311	6,519	6,339
General and administrative	5,099	5,090	7,492	5,637
Other expense, net	17	36	30	190
Total	$ 9,343	$ 9,370	$ 21,801	$ 23,847

(2) Includes amortization of certain intangible assets of $0.3 million, $0.1 million, $0.1 million and $0.1 million for the years ended January 31, 2017, 2018, 2019 and 2020, respectively.

(3) Includes reversals of contingent tax-related accruals of $3.5 million and $1.3 million for the years ended January 31, 2019 and 2020, respectively.

Consolidated Balance Sheet Data

	As of January 31,			
	2017	2018	2019	2020
	(in thousands)			
Cash and cash equivalents	$ 68,984	$ 61,972	$ 176,973	$ 80,843
Short-term investments	—	—	—	17,967
Working capital	5,762	(15,000)	107,047	18,201
Total assets	137,922	155,355	292,632	216,738
Deferred revenue, current and non-current	49,936	70,956	93,902	109,744
Long-term debt	—	46,332	97,245	101,074
Convertible preferred stock	594,187	693,158	—	—
Total stockholders' (deficit) equity	(556,196)	(721,964)	44,527	(49,180)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

This discussion contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Statements containing words such as "may," "believe," "could," "will," "seek," "depends," "anticipate," "expect," "intend," "plan," "project," "projections," "business outlook," "estimate," or similar expressions constitute forward-looking statements. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition or state other "forward-looking" information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. They include, but are not limited to, statements about:

- *our ability to attract new customers and retain and expand our relationships with existing customers;*
- *our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit, operating expenses, key metrics, ability to generate cash flow and ability to achieve and maintain future profitability;*
- *the anticipated trends, market opportunity, growth rates and challenges in our business and in the business intelligence software market;*
- *the efficacy of our sales and marketing efforts;*
- *our ability to compete successfully in competitive markets;*
- *our ability to respond to and capitalize on rapid technological changes;*
- *our expectations and management of future growth;*
- *our ability to enter new markets and manage our expansion efforts, particularly internationally;*
- *our ability to develop new product features;*
- *our ability to attract and retain key employees and qualified technical and sales personnel;*
- *our ability to effectively and efficiently protect our brand;*
- *our ability to timely scale and adapt our infrastructure;*
- *the effect of general economic and market conditions on our business;*
- *the impact of the coronavirus outbreak, including on the global economy, our results of operations, enterprise software spending, and business continuity;*
- *our ability to protect our customers' data and proprietary information;*
- *our ability to maintain, protect, and enhance our intellectual property and not infringe upon others' intellectual property; and*
- *our ability to comply with all governmental laws, regulations and other legal obligations.*

Our actual results may differ materially from those contained in or implied by any forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this report, including those factors discussed in Part I, Item 1A (Risk Factors).

In light of the significant uncertainties and risks inherent in these forward-looking statements, you should not regard these statements as a representation or warranty by us or anyone else that we will achieve our objectives or plans in any specified time frame, or at all, or as predictions of future events. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read the following discussion and analysis of our financial condition and results of operations together with the consolidated financial statements and related notes that are included elsewhere in this Annual Report on Form 10-K. Our fiscal year ends on January 31. References to fiscal 2020, for example, refer to the fiscal year ended January 31, 2020.

Overview

We founded Domo in 2010 with the vision of digitally connecting everyone within the enterprise with real-time, rich, relevant data and then encouraging all employees to collaborate and act on that data. We realized that many organizations were unable to access the massive amounts of data that they were collecting in siloed cloud applications and on-premise databases. Furthermore, even for organizations that were capable of accessing their data, the process for doing so was time-consuming, costly, and often resulted in the data being out-of-date by the time it reached decision makers. The delivery format, including alert functionality, and devices were not adequate for the connected and real-time mobile workforce. Based on these observations, it was apparent that all organizations, regardless of size or industry, were failing to unlock the power of all of their people, data, and systems. To address these challenges, we provide a cloud-based platform that digitally connects everyone at an organization – from the CEO to frontline employees – with all the people, data and systems in an organization, giving them access to real-time data and insights and allowing them to manage their business from their smartphones.

We offer our platform to our customers as a subscription-based service. Subscription fees are based upon the chosen Domo package which includes tier-based platform capabilities as well as users. Business leaders, department heads and managers are the typical initial subscribers to our platform, deploying Domo to solve a business problem or to enable departmental access. Over time, as customers recognize the value of our platform, we increasingly engage with CIOs and other executives to facilitate broad enterprise adoption.

A majority of our customers subscribe to our services through multi-year contracts. As of January 31, 2020, 55% of our customers were under multi-year contracts compared to 42% and 32% of customers as of January 31, 2019 and 2018, respectively. This transition to a higher percentage of multi-year contracts, among both new and existing customers, has enhanced the predictability of our subscription revenue. We typically invoice our customers annually in advance, but have recently seen an increase in semi-annual and quarterly billing terms. A majority of our annual recurring revenue is up for renewal during the fiscal year ending January 31, 2021.

Our business model focuses on maximizing the lifetime value of a customer relationship. We recognize subscription revenue ratably over the term of the subscription period. In general, customer acquisition costs and other upfront costs associated with new customers are much higher in the first year than the aggregate revenue we recognize from those new customers in the first year. Over the lifetime of the customer relationship, we also incur sales and marketing costs to renew or increase usage per customer. However, these costs, as a percentage of revenue, are significantly less than those initially incurred to acquire the customer. As a result, the profitability of a customer to our business in any particular period depends in part upon how long a customer has been a subscriber and the degree to which it has expanded its usage of our platform.

Our platform addresses the diverse and evolving needs of employees. Historically, our sales and marketing efforts have been concentrated on initiatives, including digital marketing, which allowed us to quickly attract a large number of customers and establish our platform in a crowded market. These initial efforts were primarily targeted toward small and medium sized businesses, with smaller average annual contract values, or ACV, and lower renewal rates. Over time, the breadth of our platform's capabilities has attracted an increasing number of enterprise customers, and we have continued to expand our presence within those customers.

From inception through January 31, 2020, we have invested $464.2 million in the development of our platform. As of January 31, 2020, we had 233 employees in our research and development organization. While we expect to continue to invest in research and development, we anticipate that these expenses will decrease as a percentage of revenue over time.

For the years ended January 31, 2018, 2019 and 2020, we had total revenue of $108.5 million, $142.5 million and $173.4 million, respectively, representing year-over-year growth of 31% and 22% for the years ended January 31, 2019 and 2020, respectively. Although revenue and billings contribution from our enterprise customers may vary from period to period, they have been a key driver of revenue growth. For the years ended January 31, 2018, 2019 and 2020, revenue from enterprise customers was $48.4 million, $62.1 million, and $81.9 million, or year-over-year growth of 28% and 32%, respectively. For the years ended January 31, 2018, 2019 and 2020, no single customer accounted for more than 10% of our total revenue, nor did any single organization when accounting for multiple subsidiaries or divisions which may have been invoiced separately. Revenue from customers with billing addresses in the United States comprised 82%, 77% and 75% of our total revenue for the years ended January 31, 2018, 2019 and 2020, respectively.

Our revenue growth rate is expected to decline in future periods due to a number of reasons, which may include the maturation of our business, increase in overall revenue over time, slowing demand for our platform, increasing competition, a decrease in the growth of the markets in which we compete, or if we fail, for any reason, to continue to capitalize on growth opportunities, a decrease in our renewal rates, or a decline in upsells.

We have incurred significant net losses since our inception, including net losses of $176.6 million, $154.3 million and $125.7 million for the years ended January 31, 2018, 2019 and 2020, respectively, and had an accumulated deficit of $1,037.7 million at January 31, 2020. We expect to incur losses for the foreseeable future and may not be able to achieve or sustain profitability.

Recent Developments

A novel strain of coronavirus, COVID-19, emerged in China in December 2019 and began to spread globally, including to the United States, in early 2020. The World Health Organization has declared COVID-19 to be a public health emergency of international concern. The full impact of the COVID-19 outbreak is inherently uncertain at the time of this report. The COVID-19 outbreak has resulted in travel restrictions and in some cases, prohibitions of non-essential activities, disruption and shutdown of businesses and greater uncertainty in global financial markets.

We cannot predict the extent to which the COVID-19 outbreak will impact our business or operating results, which is highly dependent on inherently uncertain future developments, including the severity of COVID-19 and the actions taken by governments and private businesses in relation to COVID-19 containment. Because our platform is offered as a subscription-based service, the effect of the outbreak may not be fully reflected in our operating results until future periods, if at all.

We have adopted several measures in response to the COVID-19 outbreak, including instructing employees to work from home, making adjustments to our expenses and cash flow to correlate with anticipated declines in billings and cash collections from customers, shifting certain of our customer events, such as Domopalooza, to online-only webcasts and restricting non-critical business travel by our employees. Historically, a significant portion of field sales and professional services were conducted in person. Currently, as a result of the work and travel restrictions related to the ongoing COVID-19 outbreak, substantially all of our sales and professional services activities are being conducted remotely. As of the date of this report, we do not yet know the extent of the negative impact on our ability to attract, serve, retain or upsell customers. Furthermore, existing and potential customers may choose to reduce or delay technology spending in response to the COVID-19 outbreak, or attempt to renegotiate contracts and obtain concessions, which may materially and negatively impact our operating results, financial condition and prospects.

Factors Affecting Performance

Continue to Attract New Customers

We believe that our ability to expand our customer base is an important indicator of market penetration, the growth of our business, and future business opportunities. We define a customer at the end of any particular quarter as an entity that generated revenue greater than $2,500 during that quarter. In situations where an organization has multiple subsidiaries or divisions, each entity that is invoiced at a separate billing address is treated as a separate customer. In cases where customers purchase through a reseller, each end customer is counted separately.

As of January 31, 2020, we had over 1,800 customers. We focus our sales and marketing resources on obtaining customers with over $100 million in revenue. For the years ended January 31, 2018, 2019 and 2020, our enterprise customers accounted for 46%, 45% and 47% of our revenue, respectively. In order to accelerate customer growth, we intend to further develop our partner ecosystem by establishing agreements with more software resellers, systems integrators and implementation partners to provide broader customer and geographic coverage. We believe we are underpenetrated in the overall market and have significant opportunity to expand our customer base over time.

Customer Upsell and Retention

We employ a land and expand sales model, and our performance depends on our ability to retain customers and expand the number of users and use cases at existing customers over time. It currently takes multiple years for our customers to fully embrace the power of our platform. We believe that as customers deploy greater volumes and sources of data for multiple use cases, the unique features of our platform can address the needs of everyone within their organization. We are still in the early stages of expanding within many of our customers.

We have invested in platform capabilities and online support resources that allow our customers to expand the use of our platform in a self-guided manner. Our professional services, customer support and customer success functions also support our sales force by helping customers to successfully deploy our platform and implement additional use cases. In addition, we believe our partner ecosystem will become increasingly important over time. We work closely with our customers to drive increased engagement with our platform by identifying new use cases through our customer success teams, as well as in-platform, self-guided experiences. We actively engage with our customers to assess whether they are satisfied and fully realizing the benefits of our platform. While these efforts often require a substantial commitment and upfront costs, we believe our investment in product, customer support, customer success and professional services will create opportunities to expand our customer relationships over time.

Our ability to drive growth and generate incremental revenue depends heavily on our ability to retain our customers and increase their usage of our platform. An important way that we measure our performance in this area is to track the growth in our subscription revenue generated from a cohort of customers over time. With that objective in mind, we allocate our customer success and customer support resources to align with maximizing the retention and expansion of our subscription revenue.

Our subscription net revenue retention rate compares the subscription revenue in a given period from the cohort of customers that generated subscription revenue at the beginning of the same period in the prior fiscal year. The subscription net revenue retention rate is the quotient obtained by dividing the subscription revenue generated from that cohort in a period, by the subscription revenue generated from that same cohort in the corresponding prior year period.

The following table sets forth our subscription net revenue retention rate for each of the eight quarters in the period ended January 31, 2020:

	Q1 2019	Q2 2019	Q3 2019	Q4 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
All Customers	105%	105%	106%	103%	104%	101%	106%	105%

As we continue to enhance our product and develop methods to encourage wider and more strategic adoptions, including focusing our sales and marketing activities towards enterprise customers, we expect that our customer retention rate will increase over the long term; however, in fiscal 2021 we anticipate our customer retention will be negatively impacted by the current COVID-19 pandemic. Our ability to successfully upsell and the impact of cancellations may vary from period to period. The extent of this variability depends on a number of factors including the size and timing of upsells and cancellations relative to the initial subscriptions.

Sales and Marketing Efficiency

We are focused on increasing the efficiency of our sales force and marketing activities by enhancing account targeting, messaging, field sales operations and sales training in order to reduce our sales and marketing expense as a percentage of revenue and accelerate the adoption of our platform. Our sales strategy depends on our ability to continue to attract top talent, to increase our pipeline of business, and to enhance sales productivity. We focus on productivity per quota-carrying sales representative and the time it takes our sales representatives to reach full productivity.

We manage our pipeline by sales representative to ensure sufficient coverage of our sales targets. Our ability to manage our sales productivity and pipeline are important factors to the success of our business. We have shifted marketing spending from broad-based initiatives to targeted account-based marketing campaigns and user events that we believe will result in contracts with larger companies which we expect will result in more upsell ACV potential.

Sales and marketing expense as a percentage of total revenue has improved from 121% and 92% for the years ended January 31, 2018 and 2019, respectively, to 74% for the year ended January 31, 2020.

Leverage Research and Development Investments for Future Growth

We plan to continue to make investments in areas of our business to continue to expand our platform functionality. This may include investing in machine learning algorithms, predictive analytics, and other artificial intelligence technologies to create alerts, detect anomalies, optimize queries, and suggest areas of interest to help people focus on what matters most. These investments may also include extending the functionality and effectiveness of our platform through improvements to the Domo Appstore and developer toolkits, which enable customers and partners to quickly build and deploy custom applications. The amount of new investments required to achieve our plans is expected to decrease as a percentage of revenue compared to historical years.

Research and development expense as a percentage of revenue has improved from 72% and 53% for the years ended January 31, 2018 and 2019, respectively, to 40% for the year ended January 31, 2020.

Key Business Metric

Billings

Billings represent our total revenue plus the change in deferred revenue in a period. Billings reflect sales to new customers plus subscription renewals and upsells to existing customers, and represent amounts invoiced for subscription, support and professional services. We typically invoice customers in advance in annual installments for subscriptions to our platform, but have recently seen an increase in semi-annual and quarterly billing terms. Because we generate most of our revenue from customers who are invoiced on an annual basis and have a wide range of annual contract values, we may experience variability due to typical enterprise buying patterns and timing of large initial contracts, renewals and upsells.

The following table sets forth our billings for the years ended January 31, 2018, 2019 and 2020:

	Year Ended January 31,		
	2018	2019	2020
Billings (in thousands)	$ 129,544	$ 165,410	$ 189,237

Components of Results of Operations

Revenue

We offer subscriptions to our cloud-based platform. We derive our revenue primarily from subscriptions and professional services. Subscription revenue consists primarily of fees to provide our customers access to our cloud-based platform, which includes online customer support resources at no additional cost. Professional service fees include implementation services, optimization services, and training.

Subscription revenue is a function of the number of customers, platform tier, and number of users at each customer, and the price per user. Subscription revenue is recognized ratably over the related contractual term beginning on the date the platform is made available to the customer. Our new business subscriptions typically have a term of one to three years, and we generally invoice our customers in annual installments at the beginning of each year in the subscription period. Amounts that have been invoiced are initially recorded as deferred revenue and are recognized ratably over the subscription period.

Professional services and other revenue primarily consists of implementation services sold with new subscriptions, as well as professional services sold separately, including training and education. Professional services are generally billed in advance and revenue from these arrangements is recognized as the services are performed. Our professional services engagements typically span from a few weeks to several months.

Cost of Revenue

Cost of subscription revenue consists primarily of third-party hosting services and data center capacity; salaries, benefits, bonuses and stock-based compensation, or employee-related costs, directly associated with cloud infrastructure and customer support personnel; amortization expense associated with capitalized software development costs; depreciation expense associated with computer equipment and software; certain fees paid to various third parties for the use of their technology and services; and allocated overhead. Allocated overhead includes items such as information technology infrastructure, rent, and certain employee benefit costs.

Cost of professional services and other revenue consists primarily of employee-related costs directly associated with these services, third-party consultant fees, and allocated overhead.

Operating Expenses

Sales and Marketing. Sales and marketing expenses consist primarily of employee-related costs directly associated with our sales and marketing staff and commissions. Other sales and marketing costs include digital marketing programs and promotional events to promote our brand, including Domopalooza, our annual user conference, as well as tradeshows, advertising and allocated overhead. Contract acquisition costs, including sales commissions, are deferred and then amortized on a straight-line basis over the period of benefit, which we have determined to be approximately four years for initial contracts. Contract acquisition costs related to renewal contracts and professional services are recorded as expense when incurred if the period of benefit is one year or less.

Research and Development. Research and development expenses consist primarily of employee-related costs for the design and development of our platform, contractor costs to supplement staff levels, third-party web services, consulting services, and allocated overhead. Our cycle of frequent updates has facilitated rapid innovation and the introduction of new product features throughout our history. We capitalize certain software development costs that are attributable to developing new features and adding incremental functionality to our platform, and amortize such costs as costs of subscription revenue over the estimated life of the new feature or incremental functionality, which is generally three years.

General and Administrative. General and administrative expenses consist of employee-related costs for executive, finance, legal, human resources, recruiting and administrative personnel; professional fees for external legal, accounting, recruiting and other consulting services; and allocated overhead costs.

Other Expense, Net

Other expense, net consists primarily of interest expense related to long-term debt and interest income earned on our cash, cash equivalents and short-term investments. It also includes the effect of exchange rates on foreign currency transaction gains and losses as well as foreign currency gains and losses upon remeasurement of intercompany balances. The transactional impacts of foreign currency are recorded as foreign currency losses (gains) in the consolidated statements of operations.

Provision for Income Taxes

Provision for income taxes consists primarily of income taxes related to foreign and state jurisdictions in which we conduct business. Because of the uncertainty of the realization of the deferred tax assets, we have a full valuation allowance for domestic net deferred tax assets, including net operating loss carryforwards and tax credits related primarily to research and development.

Results of Operations

The following tables set forth selected consolidated statements of operations data and such data as a percentage of total revenue for each of the periods indicated:

	Year Ended January 31,		
	2018	2019	2020
	(in thousands)		
Revenue:			
Subscription	$ 87,463	$ 117,157	$ 146,837
Professional services and other	21,061	25,307	26,558
Total revenue	108,524	142,464	173,395
Cost of revenue:			
Subscription(1)	32,427	32,781	35,366
Professional services and other(1)	12,492	16,773	20,564
Total cost of revenue	44,919	49,554	55,930
Gross profit	63,605	92,910	117,465
Operating expenses:			
Sales and marketing(1)	131,802	131,081	127,567
Research and development(1)	78,261	75,740	69,224
General and administrative(1)(2)(3)	29,323	30,176	35,941
Total operating expenses	239,386	236,997	232,732
Loss from operations	(175,781)	(144,087)	(115,267)
Other expense, net(1)	(396)	(8,974)	(9,635)
Loss before income taxes	(176,177)	(153,061)	(124,902)
Provision for income taxes	385	1,248	754
Net loss	$ (176,562)	$ (154,309)	$ (125,656)

(1) Includes stock-based compensation expense as follows:

	Year Ended January 31,		
	2018	2019	2020
	(in thousands)		
Cost of revenue:			
Subscription	$ 48	$ 219	$ 507
Professional services and other	40	154	404
Sales and marketing	1,845	7,387	10,770
Research and development	2,311	6,519	6,339
General and administrative	5,090	7,492	5,637
Other expense, net	36	30	190
Total	$ 9,370	$ 21,801	$ 23,847

(2) Includes amortization of certain intangible assets of $0.1 million, $0.1 million and $0.1 million for the years ended January 31, 2018, 2019 and 2020, respectively.

(3) Includes reversals of contingent tax-related accruals of $3.5 million and $1.3 million for the years ended January 31, 2019 and 2020, respectively.

	Year Ended January 31,		
	2018	2019	2020
Revenue:			
Subscription	81 %	82 %	85 %
Professional services and other	19	18	15
Total revenue	100	100	100
Cost of revenue:			
Subscription	30	23	20
Professional services and other	12	12	12
Total cost of revenue	42	35	32
Gross margin	58	65	68
Operating expenses:			
Sales and marketing	121	92	74
Research and development	72	53	40
General and administrative	27	21	20
Total operating expenses	220	166	134
Loss from operations	(162)	(101)	(66)
Other expense, net	—	(6)	(6)
Loss before income taxes	(162)	(107)	(72)
Provision for income taxes	—	1	—
Net loss	(162)%	(108)%	(72)%

Discussion of the Years Ended January 31, 2019 and 2020

Revenue

	Year Ended January 31,			
	2019	2020	$ Change	% Change
	(in thousands)			
Revenue:				
Subscription	$ 117,157	$ 146,837	$ 29,680	25%
Professional services and other	25,307	26,558	1,251	5
Total revenue	$ 142,464	$ 173,395	$ 30,931	22
Percentage of revenue:				
Subscription	82%	85%		
Professional services and other	18	15		
Total	100%	100%		

Total revenue was $173.4 million for the year ended January 31, 2020, compared to $142.5 million for the year ended January 31, 2019, an increase of $30.9 million, or 22%. Subscription revenue was $146.8 million, or 85% of total revenue, for the year ended January 31, 2020, compared to $117.2 million, or 82% of total revenue, for the year ended January 31, 2019. The increase in subscription revenue was primarily due to a $23.7 million increase from new customers and a $6.0 million net increase from existing customers. Our customer count increased 5% from January 31, 2019 to January 31, 2020. We anticipate that as we continue to close new business and retain our customers that subscription revenue will continue to increase as a percent of total revenue.

Professional services and other revenue was $26.6 million, or 15% of total revenue, for the year ended January 31, 2020, compared to $25.3 million, or 18% of total revenue, for the year ended January 31, 2019. This increase is due to a higher volume of implementation and training services provided to our customers.

Cost of Revenue, Gross Profit and Gross Margin

	Year Ended January 31,			
	2019	2020	$ Change	% Change
		(in thousands)		
Cost of revenue:				
Subscription	$ 32,781	$ 35,366	$ 2,585	8%
Professional services and other	16,773	20,564	3,791	23
Total cost of revenue	$ 49,554	$ 55,930	$ 6,376	13
Gross profit	$ 92,910	$ 117,465	$ 24,555	26
Gross margin:				
Subscription	72%	76%		
Professional services and other	34	23		
Total gross margin	65	68		

Cost of subscription revenue was $35.4 million for the year ended January 31, 2020, compared to $32.8 million for the year ended January 31, 2019, an increase of $2.6 million, or 8%. The increase in cost of subscription revenue was due to an increase in costs related to third-party hosting services caused by increased customer usage.

Cost of professional services and other revenue was $20.6 million for the year ended January 31, 2020, compared to $16.8 million for the year ended January 31, 2019. This increase is primarily due to a higher volume of services provided by third-party consultants related to implementation and training and employee-related costs.

Subscription gross margin improved due to economies of scale driven by increased subscription revenue and cost improvements due to more proactive management and optimization of our third-party hosting services. We expect subscription gross margin to improve as we continue to effectively manage our data center operations and third-party hosting services.

Services gross margin declined due to heavier use of third-party consultants to perform services for our customers. In addition, rates for these consultants have increased from the prior year. We expect the gross margin for professional services to fluctuate from period to period due to changes in the proportion of services provided by third-party consultants, seasonality, as well as timing of projects.

Operating Expenses

	Year Ended January 31,			
	2019	2020	$ Change	% Change
		(in thousands)		
Operating expenses:				
Sales and marketing	$ 131,081	$ 127,567	$ (3,514)	(3)%
Research and development	75,740	69,224	(6,516)	(9)
General and administrative	30,176	35,941	5,765	19
Total operating expenses	$ 236,997	$ 232,732	$ (4,265)	(2)
Percentage of revenue:				
Sales and marketing	92%	74%		
Research and development	53	40		
General and administrative	21	20		

Sales and marketing expenses were $127.6 million for the year ended January 31, 2020, compared to $131.1 million for the year ended January 31, 2019, a decrease of $3.5 million, or 3%. The change was primarily due to a $12.1 million decrease in marketing programs and event costs. This decrease was partially offset by an increase of $10.3 million in employee-related costs primarily due to higher sales headcount and salary increases and $3.4 million of stock-based compensation. Contract labor decreased by $2.1 million due to heavier usage of marketing consultants in the prior year.

Sales and marketing expense as a percentage of total revenue decreased from 92% in the year ended January 31, 2019 to 74% in the year ended January 31, 2020. We expect sales and marketing expense to continue to decline as a percentage of total revenue in the long term.

Research and development expenses were $69.2 million for the year ended January 31, 2020, compared to $75.7 million for the year ended January 31, 2019, a decrease of $6.5 million, or 9%. Employee-related costs and allocated overhead decreased by a combined $5.1 million due to lower headcount. Software subscription decreased by $1.0 million due to decreased usage of several software vendors. Contract labor decreased by $0.3 million due to decreased usage of development contractors.

Research and development expense as a percentage of revenue decreased from 53% in the year ended January 31, 2019 to 40% in the year ended January 31, 2020. We expect research and development expense to continue to decline as a percentage of total revenue in the long term as we leverage previous investments in our research and development organization.

General and administrative expenses were $35.9 million for the year ended January 31, 2020, compared to $30.2 million for the year ended January 31, 2019, an increase of $5.8 million, or 19%. The change was primarily due to an increase in employee-related costs and allocated overhead of $2.2 million and an increase in professional and legal fees of $1.4 million, both of which are related to additional costs associated with operating as a public company. Contract labor increased by $0.8 million due to heavier usage of third-party administrative services. Other increases included $0.7 million in costs associated with insurance premiums and a combined $0.4 million in software subscription costs, and education and training.

General and administrative expenses as a percent of revenue decreased from 21% in the year ended January 31, 2019 to 20% in the year ended January 31, 2020. In the long term, we expect general and administrative expense to decline as a percentage of total revenue as we leverage previous investments in our general and administrative organization; however, we expect general and administrative expense to increase in absolute dollars due to additional costs associated with operating as a public company including incremental costs for accounting, compliance, insurance, and investor relations.

Other Expense, Net

	Year Ended January 31,			
	2019	2020	$ Change	% Change
	(in thousands)			
Other expense, net	$ (8,974)	$ (9,635)	$ (661)	7%

Other expense, net increased $0.7 million. This increase is primarily due to an increase in interest expense of $1.5 million related to the credit facility, offset by changes in foreign exchange rates, which decreased expense by $0.5 million, and increased interest income of $0.4 million.

Provision for Income Taxes

	Year Ended January 31,			
	2019	2020	$ Change	% Change
	(in thousands)			
Provision for income taxes	$ 1,248	$ 754	$ (494)	(40)%

Provision for income taxes decreased $0.5 million due to refunds received during the year ended January 31, 2020. We expect income tax expense to increase in conjunction with growth in our international subsidiaries in the long term.

Discussion of the Years Ended January 31, 2018 and 2019

Revenue

	Year Ended January 31,			
	2018	2019	$ Change	% Change
	(in thousands)			
Revenue:				
Subscription	$ 87,463	$ 117,157	$ 29,694	34%
Professional services and other	21,061	25,307	4,246	20
Total revenue	$ 108,524	$ 142,464	$ 33,940	31
Percentage of revenue:				
Subscription	81%	82%		
Professional services and other	19	18		
Total	100%	100%		

Total revenue was $142.5 million for the year ended January 31, 2019, compared to $108.5 million for the year ended January 31, 2018, an increase of $33.9 million, or 31%. Subscription revenue was $117.2 million, or 82% of total revenue, for the year ended January 31, 2019, compared to $87.5 million, or 81% of total revenue, for the year ended January 31, 2018. The increase in subscription revenue was primarily due to a $23.4 million increase from new customers and a $6.3 million increase from existing customers. Our customer count increased 15% from January 31, 2018 to January 31, 2019.

Professional services and other revenue was $25.3 million, or 18% of total revenue, for the year ended January 31, 2019, compared to $21.1 million, or 19% of total revenue, for the year ended January 31, 2018. This increase is due to a higher volume of implementation and training services provided to our customers.

Cost of Revenue, Gross Profit and Gross Margin

	Year Ended January 31,			
	2018	2019	$ Change	% Change
	(in thousands)			
Cost of revenue:				
Subscription	$ 32,427	$ 32,781	$ 354	1%
Professional services and other	12,492	16,773	4,281	34
Total cost of revenue	$ 44,919	$ 49,554	$ 4,635	10
Gross profit	$ 63,605	$ 92,910	$ 29,305	46
Gross margin:				
Subscription	63%	72%		
Professional services and other	41	34		
Total gross margin	59	65		

Cost of subscription revenue was $32.8 million for the year ended January 31, 2019, compared to $32.4 million for the year ended January 31, 2018, an increase of $0.4 million, or 1%. The majority of the increase in cost of subscription revenue was due to employee-related costs, which increased by $2.1 million primarily as a result of salary increases. Other increases included $0.9 million related to our data center and $0.7 million in amortization of capitalized software development costs. These increases were offset by a decrease of $3.3 million related to optimization of our third-party hosting services.

Cost of professional services and other revenue was $16.8 million for the year ended January 31, 2019, compared to $12.5 million for the year ended January 31, 2018. This increase is primarily due to a higher volume of services provided by third-party consultants related to implementation and training.

Subscription gross margin improved due to economies of scale driven by increased subscription revenue and cost improvements due to more proactive management and optimization of our third-party hosting services.

Services gross margin declined due to heavier use of third-party consultants to perform services for our customers. In addition, rates for these consultants have increased from the prior year.

Operating Expenses

	Year Ended January 31,			
	2018	2019	$ Change	% Change
		(in thousands)		
Operating expenses:				
Sales and marketing	$ 131,802	$ 131,081	$ (721)	(1)%
Research and development	78,261	75,740	(2,521)	(3)
General and administrative	29,323	30,176	853	3
Total operating expenses	$ 239,386	$ 236,997	$ (2,389)	(1)
Percentage of revenue:				
Sales and marketing	121%	92%		
Research and development	72	53		
General and administrative	27	21		

Sales and marketing expenses were $131.1 million for the year ended January 31, 2019, compared to $131.8 million for the year ended January 31, 2018, a decrease of $0.7 million, or 1%. The change was primarily due to a $10.2 million decrease in marketing programs and event costs. This decrease was offset by an increase of $8.2 million in employee-related costs, including $5.6 million of stock-based compensation related to the performance vesting condition of certain RSUs, which was deemed probable of being satisfied upon the effectiveness of the registration statement related to our initial public offering, or IPO, and $2.6 million attributable to higher headcount and salary increases. Other increases included commission expense, which increased by $0.7 million due to higher sales, and travel expense, which increased by $0.4 million.

Sales and marketing expense as a percentage of total revenue decreased from 121% in the year ended January 31, 2018 to 92% in the year ended January 31, 2019.

Research and development expenses were $75.7 million for the year ended January 31, 2019, compared to $78.3 million for the year ended January 31, 2018, a decrease of $2.5 million, or 3%. Employee-related costs increased by $4.2 million due to stock-based compensation related to the performance vesting condition of certain RSUs, which was deemed probable of being satisfied upon the effectiveness of the registration statement related to our IPO. This increase was offset by a $3.6 million increase in capitalized software development costs (resulting in decreased expense) and a decrease of $3.0 million in third-party web services for internal use.

Research and development expense as a percentage of revenue decreased from 72% in the year ended January 31, 2018 to 53% in the year ended January 31, 2019.

General and administrative expenses were $30.2 million for the year ended January 31, 2019, compared to $29.3 million for the year ended January 31, 2018, an increase of $0.9 million, or 3%. Employee-related costs increased by $3.3 million, including $2.4 million of stock-based compensation related to the performance vesting condition of certain RSUs, which was deemed probable of being satisfied upon the effectiveness of the registration statement related to our IPO, and $0.9 million attributable to higher headcount and salary increases. Other increases included $0.8 million in costs associated with being a public company. These increases were offset by a $3.5 million reversal of a contingent tax-related accrual.

General and administrative expenses as a percent of revenue decreased from 27% in the year ended January 31, 2018 to 21% in the year ended January 31, 2019.

Other Expense, Net

	Year Ended January 31,			
	2018	2019	$ Change	% Change
	(in thousands)			
Other expense, net	$ (396)	$ (8,974)	$ (8,578)	2,166%

Other expense, net increased $8.6 million. This increase is primarily due to an increase in interest expense of $10.0 million related to the credit facility, offset by interest income on IPO proceeds of $2.1 million.

Provision for Income Taxes

	Year Ended January 31,			
	2018	2019	$ Change	% Change
	(in thousands)			
Provision for income taxes	$ 385	$ 1,248	$ 863	224%

Provision for income taxes increased $0.9 million due to the impact of the Tax Cuts and Jobs Act on the income tax provision for the year ended January 31, 2018 and expanded foreign operations during the year ended January 31, 2019.

Quarterly Results of Operations

The following tables set forth selected unaudited quarterly consolidated statements of operations data for each of the eight quarters in the period ended January 31, 2020, as well as the percentage of revenue that each line item represents for each quarter. The information for each of these quarters has been prepared on the same basis as the audited annual consolidated financial statements included elsewhere in this Annual Report on Form 10-K and, in the opinion of management, includes all adjustments, which consist only of normal recurring adjustments, necessary for the fair presentation of the results of operations for these periods in accordance with GAAP. This data should be read in conjunction with our audited consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. These quarterly operating results are not necessarily indicative of our operating results for a full year or any future period.

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
	(in thousands)							
Revenue:								
Subscription	$ 26,663	$ 28,166	$ 30,398	$ 31,930	$ 34,391	$ 34,873	$ 37,841	$ 39,732
Professional services and other	5,282	6,101	6,446	7,478	6,407	6,787	6,925	6,439
Total revenue	31,945	34,267	36,844	39,408	40,798	41,660	44,766	46,171
Cost of revenue:								
Subscription[(1)]	8,056	8,265	8,193	8,267	8,035	8,816	9,045	9,470
Professional services and other[(1)]	3,510	4,253	4,734	4,276	4,769	5,395	5,418	4,982
Total cost of revenue	11,566	12,518	12,927	12,543	12,804	14,211	14,463	14,452
Gross profit	20,379	21,749	23,917	26,865	27,994	27,449	30,303	31,719
Operating expenses:								
Sales and marketing[(1)]	39,656	34,002	28,034	29,389	35,949	29,501	29,784	32,333
Research and development[(1)]	19,064	20,919	18,803	16,954	17,099	17,046	17,578	17,501
General and administrative[(1)(2)]	4,644	10,207	7,055	8,270	8,017	9,275	9,590	9,059
Total operating expenses	63,364	65,128	53,892	54,613	61,065	55,822	56,952	58,893
Loss from operations	(42,985)	(43,379)	(29,975)	(27,748)	(33,071)	(28,373)	(26,649)	(27,174)
Other expense, net[(1)]	(1,919)	(2,898)	(2,371)	(1,786)	(2,325)	(2,482)	(2,368)	(2,460)
Loss before income taxes	(44,904)	(46,277)	(32,346)	(29,534)	(35,396)	(30,855)	(29,017)	(29,634)
Provision for income taxes	603	107	199	339	140	305	84	225
Net loss	$ (45,507)	$ (46,384)	$ (32,545)	$ (29,873)	$ (35,536)	$ (31,160)	$ (29,101)	$ (29,859)
Net loss per share, basic and diluted	$ (27.63)	$ (4.41)	$ (1.24)	$ (1.13)	$ (1.32)	$ (1.14)	$ (1.05)	$ (1.06)
Weighted-average number of shares used in computing net loss per share, basic and diluted	1,647	10,509	26,338	26,461	26,966	27,418	27,638	28,042

(1) Includes stock-based compensation expense as follows (in thousands):

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
Cost of revenue:								
Subscription	$ 15	$ 55	$ 74	$ 75	$ 123	$ 67	$ 151	$ 166
Professional services and other	8	70	34	42	93	60	123	128
Sales and marketing	305	3,744	1,441	1,897	4,008	2,041	2,135	2,586
Research and development	483	2,993	1,630	1,413	2,065	1,294	1,493	1,487
General and administrative	1,265	3,330	1,461	1,436	1,238	1,182	1,533	1,684
Other expense (income), net	17	(26)	14	25	48	47	47	48
Total	$ 2,093	$ 10,166	$ 4,654	$ 4,888	$ 7,575	$ 4,691	$ 5,482	$ 6,099

(2) Includes amortization of certain intangible assets as follows (in thousands):

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
General and administrative	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20	$ 20

(3) Includes reversals of contingent tax-related accruals as follows (in thousands):

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
General and administrative	$ (3,513)	$ —	$ —	$ —	$ (1,293)	$ —	$ —	$ —

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
	(as a percentage of total revenue)							
Revenue:								
Subscription	83 %	82 %	83 %	81 %	84 %	84 %	85 %	86 %
Professional services and other	17	18	17	19	16	16	15	14
Total revenue	100	100	100	100	100	100	100	100
Cost of revenue:								
Subscription	25	24	22	21	20	21	20	21
Professional services and other	11	13	13	11	11	13	12	10
Total cost of revenue	36	37	35	32	31	34	32	31
Gross margin	64	63	65	68	69	66	68	69
Operating expenses:								
Sales and marketing	124	99	76	75	88	71	67	70
Research and development	60	61	51	43	42	41	39	38
General and administrative	15	30	19	20	20	22	22	20
Total operating expenses	199	190	146	138	150	134	128	128
Loss from operations	(135)	(127)	(81)	(70)	(81)	(68)	(60)	(59)
Other expense, net	(6)	(8)	(6)	(5)	(6)	(6)	(5)	(5)
Loss before income taxes	(141)	(135)	(87)	(75)	(87)	(74)	(65)	(64)
Provision for income taxes	2	—	1	1	—	1	—	1
Net loss	(143)%	(135)%	(88)%	(76)%	(87)%	(75)%	(65)%	(65)%

Quarterly Trends in Revenue

Our quarterly revenue increased sequentially for all periods presented primarily due to increases in the number of new customers, average contract value and expanded relationships with existing customers. In some cases, revenue for professional services decreased period over period due to timing of work completed on large projects. Our professional services revenue has experienced significant volatility in the past and we expect this volatility to continue.

Quarterly Costs and Expenses Trends

Costs of subscription services remained relatively flat across the first five quarters presented above. For the three months ended July 31, 2019, October 31, 2019, and January 31, 2020, costs of subscription services increased compared to the preceding three month period due to an increase in web hosting costs as a result of increased customer usage. Costs of professional services fluctuated across the quarters presented, primarily due to timing of work completed on large projects. For the three months ended January 31, 2019 and 2020, costs of professional services decreased compared to the preceding three month period primarily due to seasonally low delivery of professional services.

All three categories of operating expenses (sales and marketing, research and development, and general and administrative), for the three months ended July 31, 2018 were higher than usual due to stock-based compensation related to the vesting of certain RSUs with a performance condition, which was deemed probable of being satisfied upon the effectiveness of the registration statement related to our IPO.

Sales and marketing costs fluctuated across the quarters presented, primarily due to the timing of marketing events. These costs were higher than usual during the three months ended April 30, 2018 and 2019 due to increased costs associated with our annual Domopalooza user conference. For the three months ended January 31, 2019 and 2020, sales and marketing costs increased compared to the preceding three month period primarily due to an increase in sales commissions related to seasonally high sales activity.

Research and development costs decreased during the three months ended October 31, 2018 and January 31, 2019 compared to the first two quarters presented due to lower employee-related costs. For the remaining quarters, research and development remained relatively flat.

General and administrative costs were lower than usual during the three months ended April 30, 2018 and 2019 due to reversals of contingent tax-related accruals, and in general have increased since our initial public offering due to higher costs associated with operating as a public company.

Other expense, net fluctuated slightly due to interest rates associated with the credit facility and balances in interest-bearing accounts, but has remained relatively flat in recent quarters.

Our quarterly operating results may fluctuate due to various factors affecting our performance. In addition, we recognize revenue from subscriptions ratably over the term of the contract. Therefore, changes in our contracting activity in the near term may not impact changes to our reported revenue until future periods.

Quarterly Billings

The following table sets forth billings for each of the eight quarters in the period ended January 31, 2020.

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
Billings (in thousands)	$ 33,714	$ 35,664	$ 38,791	$ 57,241	$ 41,065	$ 38,794	$ 44,428	$ 64,950

Quarterly Billings Trends

The improvement in billings is due to the acquisition of additional customers and sales of larger subscription contracts to existing customers, which are attributable to our continued focus on selling to enterprise customers. The increase in billings during the three months ended January 31, 2019 and 2020 is primarily from seasonality due to the buying patterns of our larger customers and the higher concentration of customers renewing their subscriptions in our fiscal fourth quarter.

Liquidity and Capital Resources

As of January 31, 2020, we had $80.8 million of cash and cash equivalents and $18.0 million of short-term investments, which were held for working capital purposes. Our cash, cash equivalents and short-term investments consist primarily of cash, money market funds, certificates of deposit, reverse repurchase agreements, commercial paper, U.S. treasury securities, asset-backed securities, and corporate debt securities. In December 2017, we entered into an $80.0 million credit facility and drew $50.0 million. In April 2018, we amended the credit facility pursuant to which we were able to incur an additional $20.0 million in term loan borrowings, for a total availability of $100.0 million under the amended facility. We drew the remaining $50.0 million during April 2018.

Since inception, we have financed operations primarily through the periodic sale of convertible preferred stock, cash collected from customers for our subscriptions and services, our IPO and to a lesser extent, debt financing. Our principal uses of cash have consisted of employee-related costs, marketing programs and events, payments related to hosting our cloud-based platform and purchases of short-term investments.

We believe our existing cash and cash equivalents, together with our short-term investments, will be sufficient to meet our projected operating requirements for at least the next 12 months. We may need to raise additional funds to invest in growth opportunities, product development, sales and marketing, and other purposes. Our future capital requirements will depend on many factors, including our growth rate; the level of investments we make in product development, sales and marketing activities, and other investments to support the growth of our business; the continuing market acceptance of our platform; customer retention rates, and may increase materially from those currently planned. We may seek to raise additional funds through equity or debt financings. If we raise additional funds through the incurrence of indebtedness, such indebtedness likely would have rights that are senior to holders of our equity securities and could contain covenants that restrict operations in the same or similar manner as our credit facility. Any additional equity financing likely would be dilutive to existing stockholders. We cannot assure you that any additional financing will be available to us on acceptable terms, or at all.

Although we are not currently a party to any agreement or letter of intent with respect to potential investments in, or acquisitions of, complementary businesses, services or technologies, we may enter into these types of arrangements in the future, which could also require us to seek additional equity financing, incur indebtedness, or use cash resources. We have no present understandings, commitments or agreements to enter into any such acquisitions.

Credit Facility

The credit facility, as amended, permits us to incur up to $100.0 million in term loan borrowings, all of which had been drawn as of January 31, 2020. Each term loan requires that we pay only interest until the maturity date. A portion of the interest that accrues on the outstanding principal of each term loan is payable in cash on a monthly basis, which portion accrues at a floating rate equal to the greater of (1) 7% and (2) three-month LIBOR plus 5.5% per year. As of January 31, 2020, the interest rate was approximately 7.4%. In addition, a portion of the interest that accrues on the outstanding principal of each term loan is capitalized and added to the principal amount of the outstanding term loan on a monthly basis, which portion accrues at a fixed rate equal to 2.5% per year. In December 2017, we incurred $50.0 million in term loan borrowings under the credit facility.

We drew the remaining $50.0 million in term loan borrowing under the amended credit facility in April 2018. The amendment increased the closing fee from $3.6 million to $4.5 million.

In January 2019, we entered into an amendment to this credit facility which extended the maturity date for both outstanding loans to October 1, 2022. The amendment also revised the maximum debt ratio financial covenant and increased the amount of the closing fee from $4.5 million to $7.0 million.

The credit facility contains customary conditions to borrowing, events of default and covenants, including covenants that restrict our ability to dispose of assets, make material changes to the nature, control or location of our business, merge with or acquire other entities, incur indebtedness or encumbrances, make distributions to holders of our capital stock, make investments or enter into transactions with affiliates. In addition, we are required to comply with a financial covenant based on the ratio of our outstanding indebtedness to our annualized recurring revenue. As amended, the maximum ratio is 0.75 on January 31, 2020 and April 30, 2020; 0.70 on July 31, 2020 and October 31, 2020; 0.65 on January 31, 2021 and April 30, 2021; and 0.60 on July 31, 2021 through the maturity date.

The credit facility defines our annualized recurring revenue as four times our aggregate revenue for the immediately preceding quarter (net of recurring discounts and discounts for periods greater than one year) less the annual contract value of any customer contracts pursuant to which we were advised during such quarter would not be renewed at the end of the current term plus the annual contract value of existing customer contract increases during such quarter. This covenant is measured quarterly on a three-month trailing basis. Upon the occurrence of an event of default, such as non-compliance with covenants, any outstanding principal, interest and fees become due immediately. We were in compliance with the covenant terms of the credit facility at January 31, 2019 and January 31, 2020. The credit facility is secured by substantially all of our assets.

Historical Cash Flow Trends

	Year Ended January 31,		
	2018	2019	2020
		(in thousands)	
Net cash used in operating activities	$ (148,657)	$ (131,367)	$ (80,219)
Net cash used in investing activities	(7,596)	(7,976)	(23,815)
Net cash provided by financing activities	149,100	254,335	7,984

Operating Activities

Net cash used in operating activities is significantly influenced by the amount of cash we invest in our personnel, timing and amounts we use to fund marketing programs and events to expand our customer base, and the costs to provide our cloud-based platform and related outsourced professional services to our customers. These outflows are partially offset by the amount and timing of payments received from our customers.

Net cash used in operating activities during the year ended January 31, 2018, consisted of cash outflows of $274.0 million exceeding the $125.3 million of cash collected from customers. Significant components of cash outflows included $146.4 million for personnel costs and $74.5 million for marketing programs and events, third-party costs to provide our platform and outsourced professional services.

Net cash used in operating activities during the year ended January 31, 2019 consisted of cash outflows of $290.6 million exceeding the $159.2 million of cash collected from customers. Significant components of cash outflows included $150.6 million for personnel costs and $74.1 million for marketing programs and events, third-party costs to provide our platform and outsourced professional service.

Net cash used in operating activities during the year ended January 31, 2020 consisted of cash outflows of $274.5 million exceeding the $194.3 million of cash collected from customers. Significant components of cash outflows included $148.4 million for personnel costs and $57.7 million for marketing programs and events, third-party costs to provide our platform and outsourced professional services.

Investing Activities

Our investing activities have consisted primarily of purchases of short-term investments and property and equipment purchases. Significant components of purchased property and equipment include capitalized development costs related to internal-use software and computer equipment and software for our data center.

Net cash used in investing activities during the year ended January 31, 2018 consisted primarily of $5.1 million of purchased property and equipment and $2.2 million of capitalized development costs related to internal-use software.

Net cash used in investing activities during the year ended January 31, 2019 consisted primarily of $6.3 million of capitalized development costs related to internal-use software and $1.6 million of purchased property and equipment.

Net cash used in investing activities during the year ended January 31, 2020 consisted primarily of $102.1 million of purchases of short-term investments, offset by $84.8 million from maturities of short-term investments. The remaining amount consisted primarily of $6.0 million of capitalized development costs related to internal-use software and $0.5 million of purchased property and equipment.

Financing Activities

Our financing activities have consisted primarily of proceeds from our IPO, issuances of convertible preferred stock, proceeds from our credit facility and to a lesser extent, proceeds received from stock option exercises.

Net cash used in financing activities for the year ended January 31, 2018 consisted primarily of $99.1 million of net proceeds from the issuance of convertible preferred stock, $48.9 million of proceeds from our credit facility, net of issuance costs and $1.3 million from proceeds received from stock option exercises.

Net cash provided by financing activities for the year ended January 31, 2019 consisted primarily of $202.6 million of IPO proceeds (net of underwriters' discounts and commissions and offering costs paid during the period), $49.6 million of proceeds from our credit facility, net of issuance costs, and $2.3 million from proceeds received from stock option exercises.

Net cash provided by financing activities for the year ended January 31, 2020 consisted primarily of $7.8 million of proceeds from our employee stock purchase plan and $1.6 million of proceeds received from stock option exercises, offset by $1.4 million used to repurchase shares for tax withholdings on release of restricted stock.

Contractual Obligations and Commitments

Contractual obligations are cash that we are obligated to pay as part of certain contracts that we have entered into during the normal course of business. At January 31, 2020, the future non-cancelable minimum payments under these commitments were as follows:

	Payments Due by Period				
	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years	Total
	(in thousands)				
Long-term debt[1]	$ 7,229	$ 133,705	$ —	$ —	$ 140,934
Operating lease obligations[2]	6,926	6,299	2,428	3,780	19,433
Other obligations[3]	15,665	26,821	24,000	—	66,486
Total contractual obligations	$ 29,820	$ 166,825	$ 26,428	$ 3,780	$ 226,853

(1) Includes interest payments of $33.9 million and a closing fee due at maturity of $7.0 million.
(2) We lease our facilities under long-term operating leases, which expire at various dates through 2027.
(3) Other obligations are associated with non-cancelable contracts primarily for cloud infrastructure services and software subscriptions. Obligations under contracts that we can cancel without a significant penalty have been excluded.

Off-Balance Sheet Arrangements

As of January 31, 2020, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or variable interest entities, which would have been established for the purpose of facilitating off balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in accordance with generally accepted accounting principles in the United States, or GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. To the extent that there are material differences between these estimates and actual results, our financial condition or results of operations would be affected. We base our estimates on past experience and other assumptions that we believe are reasonable under the circumstances, and we evaluate these estimates on an ongoing basis. Critical accounting policies and estimates are those that we consider critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Revenue Recognition

We derive revenue primarily from subscriptions to our cloud-based platform and professional services. Revenue is recognized when control of these services is transferred to customers in an amount that reflects the consideration to which we expect to be entitled to in exchange for those services, net of sales taxes.

For sales through channel partners, we consider the channel partner to be the end customer for the purposes of revenue recognition as our contractual relationships with channel partners do not depend on the sale of our services to their customers and payment from the channel partner is not contingent on receiving payment from their customers. Our contractual relationships with channel partners do not allow returns, rebates, or price concessions.

The price of subscriptions is generally fixed at contract inception and therefore, our contracts do not contain a significant amount of variable consideration.

Revenue recognition is determined through the following steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, performance obligations are satisfied

Subscription Revenue

Subscription revenue primarily consists of fees paid by customers to access our cloud-based platform, including support services. The majority of our subscription agreements have multi-year contractual terms and a smaller percentage have annual contractual terms. Revenue is recognized ratably over the related contractual term beginning on the date that the platform is made available to a customer. Access to the platform represents a series of distinct services as we continually provide access to and fulfill our obligation to the end customer over the subscription term. The series of distinct services represents a single performance obligation that is satisfied over time. We recognize revenue ratably because the customer receives and consumes the benefits of the platform throughout the contract period. Our contracts are generally non-cancelable.

Professional Services and Other Revenue

Professional services revenue consists of implementation services sold with new subscriptions as well as professional services sold separately. Other revenue includes training and education. Professional services arrangements are billed in advance, and revenue from these arrangements is recognized as the services are provided, generally based on hours incurred. Training and education revenue is also recognized as the services are provided.

Contracts with Multiple Performance Obligations

Most of our contracts with new customers contain multiple performance obligations, generally consisting of subscriptions and professional services. For these contracts, individual performance obligations are accounted for separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices are determined based on historical standalone selling prices, taking into consideration overall pricing objectives, market conditions and other factors, including contract value, customer demographics and the number and types of users within the contract.

As of January 31, 2020, approximately $218.3 million of revenue was expected to be recognized from remaining performance obligations for subscription contracts. We expect to recognize approximately $134.0 million of this amount during the year ending January 31, 2021, with an additional $54.4 million being recognized during the year ending January 31, 2022, and the balance recognized thereafter. As of January 31, 2020, approximately $14.6 million of revenue was expected to be recognized from remaining performance obligations for professional services and other contracts, $11.1 million of which is expected to be recognized during the year ending January 31, 2021, and the balance recognized thereafter.

Contract Acquisition Costs

Contract acquisition costs, net are stated at cost net of accumulated amortization and primarily consist of deferred sales commissions, which are considered incremental and recoverable costs of obtaining a contract with a customer. Contract acquisition costs for initial contracts are deferred and then amortized on a straight-line basis over the period of benefit, which we have determined to be approximately four years. The period of benefit is determined by taking into consideration contractual terms, expected customer life, changes in our technology and other factors. Contract acquisition costs for renewal contracts are not commensurate with contract acquisition costs for initial contracts and are recorded as expense when incurred if the period of benefit is one year or less. If the period of benefit is greater than one year, costs are deferred and then amortized on a straight-line basis over the period of benefit. Contract acquisition costs related to professional services and other performance obligations with a period of benefit of one year or less are recorded as expense when incurred. Amortization of contract acquisition costs is included in sales and marketing expenses in the accompanying consolidated statements of operations.

Capitalized Internal-Use Software Costs

We capitalize certain costs related to development of our platform incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Maintenance and training costs are also expensed as incurred. Capitalized costs are included in property and equipment.

Capitalized internal-use software is amortized as subscription cost of revenue on a straight-line basis over its estimated useful life, which is generally three years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired. Goodwill and indefinite-lived intangible assets are not amortized, but rather tested for impairment at least annually on November 1 or more often if and when circumstances indicate that the carrying value may not be recoverable. Finite-lived intangible assets are amortized over their useful lives.

Goodwill is tested for impairment based on reporting units. We periodically reevaluate our business and have determined that it continues to operate in one segment, which is also considered the sole reporting unit. Therefore, goodwill is tested for impairment at the consolidated level.

We review our long-lived assets, including property and equipment and finite-lived intangible assets, for impairment whenever an event or change in facts and circumstances indicates that their carrying amounts may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount to the estimated undiscounted future cash flows expected to be generated. If the carrying amount exceeds the undiscounted cash flows, the assets are determined to be impaired and an impairment charge is recognized as the amount by which the carrying amount exceeds fair value.

Stock-Based Compensation

We have granted stock-based awards, consisting of stock options and restricted stock units, to our employees, certain consultants and certain members of our board of directors. We record stock-based compensation based on the grant date fair value of the awards, which include stock options and restricted stock units, and recognize the fair value of those awards as expense using the straight-line method over the requisite service period of the award. For restricted stock units that contain performance conditions, we recognize expense using the accelerated attribution method if it is probable the performance conditions will be met. We estimate the grant date fair value of stock options using the Black-Scholes option-pricing model.

Stock-based compensation expense related to purchase rights issued under the 2018 Employee Stock Purchase Plan, or ESPP, is based on the Black-Scholes option-pricing model fair value of the estimated number of awards as of the beginning of the offering period. Stock-based compensation expense is recognized using the straight-line method over the offering period.

The determination of the grant date fair value of stock-based awards is affected by the estimated fair value of our common stock as well as other assumptions and judgments, which are estimated as follows:

- *Fair Value Per Share of Common Stock*. Because there was no public market for our common stock prior to the IPO, the board of directors determined the common stock fair value at the grant date by considering numerous objective and subjective factors, including contemporaneous valuations of our common stock, actual operating and financial performance, market conditions, and performance of comparable publicly traded companies, business developments, the likelihood of achieving a liquidity event, and transactions involving preferred and common stock, among other factors. Subsequent to the IPO, we determine the fair value of common stock as of each grant date using the market closing price of our Class B common stock on the date of grant.

- *Expected Term*. The expected term is determined using the simplified method, which is calculated as the midpoint of the option’s contractual term and vesting period. We use this method due to limited stock option exercise history. For the ESPP, the expected term is the beginning of the offering period to the end of each purchase period.

- *Expected Volatility*. Since a public market for our common stock did not exist prior to the IPO and, therefore, we do not have a sufficient trading history of our common stock, expected volatility is estimated based on a weighted average of the volatility of similar publicly held companies and the Company's common stock over a period equivalent to the expected term of the awards.

- *Risk-free Interest Rate*. The risk-free interest rate is determined using U.S. Treasury rates with a similar term as the expected term of the option.

- *Expected Dividend Yield*. We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (1) are no longer an emerging growth company or (2) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

Recent Accounting Pronouncements

ASU No. 2016-02

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842),* which requires lessees to record most leases on the balance sheet and recognize the expenses on the income statement in a manner similar to current practice. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. For public entities, the new standard is effective for fiscal years beginning after December 15, 2018 and interim periods within that reporting period. For all other entities, this standard is effective for annual reporting periods beginning after December 15, 2019 and interim periods within annual periods beginning after December 15, 2020. Early adoption is permitted. We expect to adopt this standard as of February 1, 2020 using the modified retrospective transition method with the option to recognize a cumulative-effect adjustment at the date of adjustment. Upon adoption, we expect to elect the transition package of practical expedients permitted within the new standard, which among other things, allows the carryforward of the historical lease classification. We continue to evaluate which other, if any, practical expedients will be elected.

We are in the final stages of completing our review of historical lease contracts to quantify the expected impact of adoption on our consolidated financial statements. To illustrate the magnitude of this change, the remaining amounts payable under our off-balance sheet operating leases at January 31, 2020 is disclosed in Note 11, "Commitments and Contingencies." Beginning on February 1, 2020, remaining amounts payable under our operating leases, excluding those with terms less than 12 months, will be discounted and recorded as right-of-use assets and lease liabilities on our consolidated balance sheet. We do not anticipate that the adoption of this standard will have a material impact on our consolidated statements of operations or statements of cash flows.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326)*, which requires the measurement and recognition of expected credit losses for certain financial instruments, which includes our accounts receivable and available-for-sale debt securities. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will result in more timely recognition of credit losses. For available-for-sale debt securities, credit losses should be recorded through an allowance for credit losses. We expect to adopt this standard for the year ending January 31, 2021. The standard requires a cumulative effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. We are evaluating the impact of the adoption of ASU 2016-13 on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to certain market risks in the ordinary course of our business. These risks primarily include interest rate sensitivities as follows:

Interest Rate Risk

As of January 31, 2020, we had cash and cash equivalents of $80.8 million and $18.0 million of short-term investments, which were held for working capital purposes. Our cash, cash equivalents and short-term investments consist primarily of cash, money market funds, certificates of deposit, reverse repurchase agreements, commercial paper, U.S. treasury securities, asset-backed securities, and corporate debt securities. We do not enter into investments for trading of speculative purposes. Due to the short-term nature of these instruments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. Decreases in interest rates, however, would reduce future interest income.

Interest rate risk also reflects our exposure to movements in interest rates associated with our credit facility. At January 31, 2020, we had total debt outstanding with a carrying amount of $101.1 million, which approximates fair value. A portion of the interest that accrues on outstanding principal of our credit facility is payable in cash on a monthly basis, which portion accrues at a floating rate equal to the greater of (1) 7% and (2) three-month LIBOR plus 5.5% per year. As of January 31, 2020, the interest rate was approximately 7.4%. In addition, a portion of the interest that accrues on the outstanding principal of each term loan is capitalized and added to the principal amount of the outstanding term loan on a monthly basis, which portion accrues at a fixed rate equal to 2.5% per year.

A hypothetical 10% change in interest rates after January 31, 2020 would not have a material impact on the fair value of our outstanding debt, even at the borrowing limit, or in the returns on our cash.

Foreign Currency Exchange Risk

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

We have experienced and will continue to experience fluctuations in net loss as a result of transaction gains or losses related to remeasuring certain current asset and current liability balances that are denominated in currencies other than the functional currency of the entities in which they are recorded. We have not engaged in the hedging of foreign currency transactions to date. We are considering the costs and benefits of initiating such a program and may in the future hedge balances and transactions denominated in currencies other than the U.S. dollar as we expand international operations.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Domo, Inc. (the Company) as of January 31, 2019 and 2020, the related consolidated statements of operations, comprehensive loss, convertible preferred stock and stockholders’ equity (deficit) and cash flows for each of the three years in the period ended January 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at January 31, 2019 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2020, in conformity with U.S. generally accepted accounting principles.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company’s financial statements 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2010.

Salt Lake City, Utah

April 10, 2020

Domo, Inc.

Consolidated Balance Sheets

(in thousands, except per share amounts)

	As of January 31,	
	2019	2020
Assets		
Current assets:		
Cash and cash equivalents	$ 176,973	$ 80,843
Short-term investments	—	17,967
Accounts receivable, net of allowances of $3,387 and $2,164 as of January 31, 2019 and January 31, 2020, respectively	48,421	47,967
Contract acquisition costs, net	10,425	12,676
Prepaid expenses and other current assets	10,935	12,809
Total current assets	246,754	172,262
Property and equipment, net	12,595	12,816
Contract acquisition costs, noncurrent, net	18,030	17,083
Intangible assets, net	4,415	3,865
Goodwill	9,478	9,478
Other assets	1,360	1,234
Total assets	$ 292,632	$ 216,738
Liabilities and stockholders' equity (deficit)		
Current liabilities:		
Accounts payable	$ 2,609	$ 2,298
Accrued expenses and other current liabilities	48,139	46,473
Deferred revenue	88,959	105,290
Total current liabilities	139,707	154,061
Deferred revenue, noncurrent	4,943	4,454
Other liabilities, noncurrent	6,210	6,329
Long-term debt	97,245	101,074
Total liabilities	248,105	265,918
Commitments and contingencies (Note 11)		
Stockholders' equity (deficit):		
Preferred stock, $0.001 par value per share; 10,000 shares authorized as of January 31, 2019 and 2020; no shares issued and outstanding as of January 31, 2019 and 2020	—	—
Class A common stock, $0.001 par value per share; 3,264 shares authorized as of January 31, 2019 and 2020; 3,264 shares issued and outstanding as of January 31, 2019 and 2020	3	3
Class B common stock, $0.001 par value per share; 500,000 shares authorized as of January 31, 2019 and 2020; 23,435 and 24,986 shares issued and outstanding as of January 31, 2019 and 2020, respectively	23	25
Additional paid-in capital	956,145	988,141
Accumulated other comprehensive income	438	389
Accumulated deficit	(912,082)	(1,037,738)
Total stockholders' equity (deficit)	44,527	(49,180)
Total liabilities and stockholders' equity (deficit)	$ 292,632	$ 216,738

See accompanying notes to consolidated financial statements.

Domo, Inc.

Consolidated Statements of Operations

(in thousands, except per share amounts)

	Year Ended January 31,		
	2018	2019	2020
Revenue:			
Subscription	$ 87,463	$ 117,157	$ 146,837
Professional services and other	21,061	25,307	26,558
Total revenue	108,524	142,464	173,395
Cost of revenue:			
Subscription	32,427	32,781	35,366
Professional services and other	12,492	16,773	20,564
Total cost of revenue	44,919	49,554	55,930
Gross profit	63,605	92,910	117,465
Operating expenses:			
Sales and marketing	131,802	131,081	127,567
Research and development	78,261	75,740	69,224
General and administrative	29,323	30,176	35,941
Total operating expenses	239,386	236,997	232,732
Loss from operations	(175,781)	(144,087)	(115,267)
Other expense, net	(396)	(8,974)	(9,635)
Loss before income taxes	(176,177)	(153,061)	(124,902)
Provision for income taxes	385	1,248	754
Net loss	$ (176,562)	$ (154,309)	$ (125,656)
Net loss per share, basic and diluted	$ (110.70)	$ (9.43)	$ (4.57)
Weighted-average number of shares used in computing net loss per share, basic and diluted	1,595	16,358	27,520

See accompanying notes to consolidated financial statements.

Domo, Inc.

Consolidated Statements of Comprehensive Loss

(in thousands)

	Year Ended January 31,		
	2018	2019	2020
Net loss	$ (176,562)	$ (154,309)	$ (125,656)
Foreign currency translation adjustments	176	(68)	(51)
Unrealized gains on securities available for sale	—	—	2
Comprehensive loss	$ (176,386)	$ (154,377)	$ (125,705)

See accompanying notes to consolidated financial statements.

Domo, Inc.

Consolidated Statements of Convertible Preferred Stock and Stockholders' Equity (Deficit)

(in thousands, except share amounts)

	Convertible Preferred Stock		Stockholders' Equity (Deficit)							
			Class A Common Stock		Class B Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount				
Balance as of January 31, 2017	13,288,510	$ 594,187	—	$ —	1,531,237	$ 2	$ 24,683	$ 330	$ (581,211)	$ (556,196)
Issuance of Series D-2 convertible preferred stock, net of issuance costs of $3,529	810,427	98,971	—	—	—	—	—	—	—	—
Exercise of stock options	—	—	—	—	111,688	—	1,338	—	—	1,338
Repurchase of Class B common stock	—	—	—	—	(4,277)	—	(121)	—	—	(121)
Stock-based compensation expense	—	—	—	—	—	—	9,334	—	—	9,334
Class B common stock warrant	—	—	—	—	—	—	67	—	—	67
Foreign currency translation adjustments	—	—	—	—	—	—	—	176	—	176
Net loss	—	—	—	—	—	—	—	—	(176,562)	(176,562)
Balance as of January 31, 2018	14,098,937	693,158	—	—	1,638,648	2	35,301	506	(757,773)	(721,964)
Initial public offering, net of offering costs of $4,091	—	—	—	—	10,580,000	10	202,526	—	—	202,536
Conversion of convertible preferred stock	(14,098,937)	(693,158)	3,263,659	3	10,835,278	11	693,144	—	—	693,158
Vesting of restricted stock units	—	—	—	—	12,625	—	—	—	—	—
Exercise of stock options	—	—	—	—	367,991	—	2,250	—	—	2,250
Stock-based compensation expense	—	—	—	—	—	—	22,291	—	—	22,291
Common stock warrants	—	—	—	—	—	—	633	—	—	633
Other comprehensive loss	—	—	—	—	—	—	—	(68)	—	(68)
Net loss	—	—	—	—	—	—	—	—	(154,309)	(154,309)
Balance as of January 31, 2019	—	—	3,263,659	3	23,434,542	23	956,145	438	(912,082)	44,527
Vesting of restricted stock units	—	—	—	—	982,591	—	—	—	—	—
Shares repurchased for tax withholdings on vesting of restricted stock	—	—	—	—	(35,446)	—	(1,428)	—	—	(1,428)
Issuance of common stock under employee stock purchase plan	—	—	—	—	506,278	2	7,810	—	—	7,812
Exercise of stock options	—	—	—	—	94,603	—	1,600	—	—	1,600
Stock-based compensation expense	—	—	—	—	—	—	24,014	—	—	24,014
Exercise of common stock warrants	—	—	—	—	3,130	—	—	—	—	—
Other comprehensive loss	—	—	—	—	—	—	—	(49)	—	(49)
Net loss	—	—	—	—	—	—	—	—	(125,656)	(125,656)
Balance as of January 31, 2020	—	$ —	3,263,659	$ 3	24,985,698	$ 25	$ 988,141	$ 389	$ (1,037,738)	$ (49,180)

See accompanying notes to consolidated financial statements.

Domo, Inc.

Consolidated Statements of Cash Flows

(in thousands)

	Year Ended January 31,		
	2018	2019	2020
Cash flows from operating activities			
Net loss	$ (176,562)	$ (154,309)	$ (125,656)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	8,131	8,787	6,917
Amortization of contract acquisition costs	9,014	8,168	11,777
Stock-based compensation expense	9,370	21,801	23,847
Other, net	174	(1,276)	1,959
Change in operating assets and liabilities:			
Accounts receivable, net	(13,186)	(12,937)	454
Contract acquisition costs	(17,160)	(15,677)	(13,178)
Prepaid expenses and other	(1,610)	(4,824)	(1,739)
Accounts payable	3,250	(8,651)	(292)
Accrued expenses and other liabilities	8,902	4,605	(150)
Deferred revenue	21,020	22,946	15,842
Net cash used in operating activities	(148,657)	(131,367)	(80,219)
Cash flows from investing activities			
Purchases of property and equipment	(7,281)	(6,373)	(6,466)
Purchases of securities available for sale	—	—	(102,084)
Proceeds from maturities of securities available for sale	—	—	84,800
Purchases of intangible assets	(315)	(1,603)	(65)
Net cash used in investing activities	(7,596)	(7,976)	(23,815)
Cash flows from financing activities			
Proceeds from initial public offering, net of underwriting discounts and commissions	—	206,627	—
Payments of costs related to initial public offering	(38)	(4,053)	—
Proceeds from issuance of convertible preferred stock, net of issuance costs	99,058	(87)	—
Proceeds from shares issued in connection with employee stock purchase plan	—	—	7,812
Shares repurchased for tax withholdings on vesting of restricted stock	—	—	(1,428)
Debt proceeds, net of issuance costs	48,900	49,642	—
Proceeds from exercise of stock options	1,338	2,250	1,600
Repurchases of common stock	(121)	—	—
Principal payments on capital lease obligations	(37)	(44)	—
Net cash provided by financing activities	149,100	254,335	7,984
Effect of exchange rate changes on cash and cash equivalents	141	9	(80)
Net (decrease) increase in cash and cash equivalents	(7,012)	115,001	(96,130)
Cash and cash equivalents at beginning of period	68,984	61,972	176,973
Cash and cash equivalents at end of period	$ 61,972	$ 176,973	$ 80,843
Supplemental disclosures of cash flow information			
Cash paid for income taxes	$ 499	$ 822	$ 365
Cash paid for interest	$ 314	$ 6,903	$ 9,083
Non-cash investing and financing activities			
Stock-based compensation capitalized as internal-use software	$ —	$ 528	$ 480
Debt issuance costs in accounts payable, accrued liabilities and other liabilities, noncurrent	$ 2,726	$ 1,993	$ —
Deferred initial public offering costs in accounts payable and accrued liabilities	$ 1,675	$ —	$ —
Issuance of warrants in connection with credit facility	$ 257	$ 673	$ —
Convertible preferred stock issuance costs in accounts payable and accrued liabilities	$ 87	$ —	$ —
Conversion of convertible preferred stock to common stock	$ —	$ 693,158	$ —

See accompanying notes to consolidated financial statements.

1. Overview and Basis of Presentation

Description of Business and Basis of Presentation

Domo, Inc. (the Company) provides a cloud-based platform that digitally connects everyone from the CEO to the frontline employee with all the data, systems and people in an organization, giving them access to real-time data and insights and allowing them to manage their business from their smartphones. The Company is incorporated in Delaware. The Company's headquarters is located in American Fork, Utah and the Company has subsidiaries in the United Kingdom, Australia, Japan, Hong Kong, Singapore, New Zealand, and Canada.

The accompanying consolidated financial statements, which include the accounts of the Company and its wholly owned subsidiaries, have been prepared in conformity with accounting principles generally accepted in the United States of America or GAAP. All intercompany balances and transactions have been eliminated in consolidation. The Company’s fiscal year ends on January 31.

Stock Split

On June 15, 2018, the Company amended its amended and restated certificate of incorporation to effect a 15-to-one reverse stock split of its common stock and convertible preferred stock. All of the share and per share information referenced throughout the consolidated financial statements and notes to the consolidated financial statements have been retroactively adjusted to reflect this reverse stock split.

Use of Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and the accompanying notes. The Company bases its estimates on historical experience and on other assumptions that its management believes are reasonable under the circumstances. Actual results could differ from those estimates. The Company’s estimates and judgments include the determination of standalone selling prices for the Company’s services, which are used to determine revenue recognition for arrangements with multiple performance obligations; the amortization period for deferred contract acquisition costs; valuation of the Company’s stock-based compensation, including the underlying estimated fair value of common stock in periods prior to the date of the Company's IPO; useful lives of fixed assets; capitalization and estimated useful life of internal-use software; valuation estimates used when evaluating impairment of long-lived and intangible assets including goodwill; and the allowance for doubtful accounts.

Foreign Currency

The functional currencies of the Company’s foreign subsidiaries are the respective local currencies. The cumulative effect of translation adjustments arising from the use of differing exchange rates from period to period is included in accumulated other comprehensive income within the consolidated balance sheets. Changes in the cumulative foreign translation adjustment are reported in the consolidated statements of convertible preferred stock and stockholders’ equity (deficit) and the consolidated statements of comprehensive loss. Transactions denominated in currencies other than the functional currency are remeasured at the end of the period and when the related receivable or payable is settled, which may result in transaction gains or losses. Foreign currency transaction gains and losses are included in other expense, net in the consolidated statements of operations. All assets and liabilities denominated in a foreign currency are translated into U.S. dollars at the exchange rate on the balance sheet date. Revenue and expenses are translated at the average exchange rate during the period, and equity balances are translated using historical exchange rates.

Segment Information

The Company operates as one operating segment. The Company’s chief operating decision maker is its chief executive officer, who reviews financial information presented on a consolidated basis for purposes of making operating decisions, assessing financial performance and allocating resources.

2. Summary of Significant Accounting Policies

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, money market funds and highly liquid investments with an original maturity date of 90 days or less from the date of purchase. The fair value of cash equivalents approximated their carrying value as of January 31, 2019 and January 31, 2020.

Short-Term Investments

The Company's short-term investments are primarily comprised of commercial paper, U.S. treasury securities, asset-backed securities and corporate debt securities. The Company determines the appropriate classification of its short-term investments at the time of purchase and reevaluates such designation at each balance sheet date. The Company has classified and accounted for its short-term investments as available-for-sale securities as the Company may sell these securities at any time for use in its current operations or for other purposes, even prior to maturity. As a result, the Company classifies its short-term investments, including securities with stated maturities beyond twelve months, within current assets in the condensed consolidated balance sheets.

The Company's short-term investments are recorded at fair value each reporting period. Unrealized gains and losses on these short-term investments are reported as a separate component of accumulated other comprehensive income in the condensed consolidated balance sheets until realized. Interest income is reported within other expense, net in the condensed consolidated statements of operations. The Company periodically evaluates its short-term investments to assess whether those with unrealized loss positions are other-than-temporarily impaired. The Company considers various factors in determining whether to recognize an impairment charge, including the length of time the investment has been in a loss position, the extent to which the fair value is less than the Company's cost basis, and the financial condition and near-term prospects of the investee. If the Company determines that the decline in an investment's fair value is other-than-temporary, the difference is recognized as an impairment loss in the condensed consolidated statements of operations. Realized gains and losses are reported in other expense, net in the condensed consolidated statements of operations.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount (net of allowances), do not require collateral, and do not bear interest. The Company's payment terms generally provide that customers pay within 30 days of the invoice date.

The Company maintains an allowance for doubtful accounts for amounts the Company does not expect to collect. In establishing the required allowance, management considers historical losses, current market conditions, customers' financial condition, the age of the receivables, and current payment patterns. Account balances are written off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

Changes in the Company's allowance for doubtful accounts for the years ended January 31, 2018, 2019 and 2020 were as follows (in thousands):

Balance as of January 31, 2017	$	1,580
Additions		5,003
Write-offs		(3,664)
Balance as of January 31, 2018		2,919
Additions		5,033
Write-offs		(4,565)
Balance as of January 31, 2019		3,387
Additions		5,508
Write-offs		(6,731)
Balance as of January 31, 2020	$	2,164

2. Summary of Significant Accounting Policies (Continued)

Contract Acquisition Costs

Contract acquisition costs, net are stated at cost net of accumulated amortization and primarily consist of deferred sales commissions, which are considered incremental and recoverable costs of obtaining a contract with a customer. Contract acquisition costs for initial contracts are deferred and then amortized on a straight-line basis over the period of benefit, which the Company has determined to be approximately four years. The period of benefit is determined by taking into consideration contractual terms, expected customer life, changes in the Company's technology and other factors. Contract acquisition costs for renewal contracts are not commensurate with contract acquisition costs for initial contracts and are recorded as expense when incurred if the period of benefit is one year or less. If the period of benefit is greater than one year, costs are deferred and then amortized on a straight-line basis over the period of benefit. Contract acquisition costs related to professional services and other performance obligations with a period of benefit of one year or less are recorded as expense when incurred. Amortization of contract acquisition costs is included in sales and marketing expenses in the accompanying consolidated statements of operations.

Amortization expense related to contract acquisition costs was $9.0 million, $8.2 million and $11.8 million for the years ended January 31, 2018, 2019 and 2020, respectively. There was no impairment charge in relation to contract acquisition costs for the periods presented.

Property and Equipment

Property and equipment, net, are stated at cost less accumulated depreciation. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets or over the related lease terms (if shorter). Repairs and maintenance costs are expensed as incurred.

The estimated useful lives of property and equipment are as follows:

Computer equipment and software	2-3 years
Furniture, vehicles and office equipment	3 years
Leasehold improvements	Shorter of remaining lease term or estimated useful life

Capitalized Internal-Use Software Costs

The Company capitalizes certain costs related to development of its platform incurred during the application development stage. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Maintenance and training costs are also expensed as incurred. Capitalized costs are included in property and equipment.

Capitalized internal-use software is amortized as subscription cost of revenue on a straight-line basis over its estimated useful life, which is generally three years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

Goodwill and Intangible Assets

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired. Goodwill and indefinite-lived intangible assets are not amortized, but rather tested for impairment at least annually on November 1 or more often if and when circumstances indicate that the carrying value may not be recoverable. Finite-lived intangible assets are amortized over their useful lives.

Goodwill is tested for impairment based on reporting units. The Company periodically reevaluates the business and has determined that it continues to operate in one segment, which is also considered the sole reporting unit. Therefore, goodwill is tested for impairment at the consolidated level.

The Company reviews its long-lived assets, including property and equipment and finite-lived intangible assets, for impairment whenever an event or change in facts and circumstances indicates that their carrying amounts may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount to the estimated undiscounted future cash flows

2. Summary of Significant Accounting Policies (Continued)

expected to be generated. If the carrying amount exceeds the undiscounted cash flows, the assets are determined to be impaired and an impairment charge is recognized as the amount by which the carrying amount exceeds fair value.

There was no goodwill acquired and no impairment charges for goodwill or long-lived assets recorded during the periods presented.

Revenue Recognition

The Company derives revenue primarily from subscriptions to its cloud-based platform and professional services. Revenue is recognized when control of these services is transferred to customers in an amount that reflects the consideration to which the Company expects to be entitled to in exchange for those services, net of sales taxes.

For sales through channel partners, the Company considers the channel partner to be the end customer for the purposes of revenue recognition as the Company's contractual relationships with channel partners do not depend on the sale of the Company's services to their customers and payment from the channel partner is not contingent on receiving payment from their customers. The Company's contractual relationships with channel partners do not allow returns, rebates, or price concessions.

The price of subscriptions is generally fixed at contract inception and therefore, the Company's contracts do not contain a significant amount of variable consideration.

Revenue recognition is determined through the following steps:

- Identification of the contract, or contracts, with a customer
- Identification of the performance obligations in the contract
- Determination of the transaction price
- Allocation of the transaction price to the performance obligations in the contract
- Recognition of revenue when, or as, performance obligations are satisfied

Subscription Revenue

Subscription revenue primarily consists of fees paid by customers to access the Company’s cloud-based platform, including support services. The majority of the Company's subscription agreements have multi-year contractual terms and a smaller percentage have annual contractual terms. Revenue is recognized ratably over the related contractual term beginning on the date that the platform is made available to a customer. Access to the platform represents a series of distinct services as the Company continually provides access to and fulfills its obligation to the end customer over the subscription term. The series of distinct services represents a single performance obligation that is satisfied over time. The Company recognizes revenue ratably because the customer receives and consumes the benefits of the platform throughout the contract period. The Company's contracts are generally non-cancelable.

Professional Services and Other Revenue

Professional services revenue consists of implementation services sold with new subscriptions as well as professional services sold separately. Other revenue includes training and education. Professional services arrangements are billed in advance, and revenue from these arrangements is recognized as the services are provided, generally based on hours incurred. Training and education revenue is also recognized as the services are provided.

Contracts with Multiple Performance Obligations

Most of the Company's contracts with new customers contain multiple performance obligations, generally consisting of subscriptions and professional services. For these contracts, individual performance obligations are accounted for separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices are determined based on historical standalone selling prices, taking into consideration overall pricing objectives, market conditions and other factors, including contract value, customer demographics and the number and types of users within the contract.

2. Summary of Significant Accounting Policies (Continued)

Deferred Revenue

The Company's contracts are typically billed annually in advance. Deferred revenue includes amounts collected or billed in excess of revenue recognized. Deferred revenue is recognized as revenue as the related performance obligations are satisfied.

Deferred revenue that will be recognized during the succeeding twelve-month period is recorded as a current liability and the remaining portion is recorded as a noncurrent liability.

Cost of Revenue

Cost of subscription revenue consists primarily of third-party hosting services and data center capacity; employee-related costs directly associated with cloud infrastructure and customer support personnel, including salaries, benefits, bonuses and stock-based compensation; amortization expense associated with capitalized software development costs; depreciation expense associated with computer equipment and software; certain fees paid to various third parties for the use of their technology and services; and allocated overhead. Allocated overhead includes items such as information technology infrastructure, rent, and employee benefit costs.

Cost of professional services and other revenue consists primarily of employee-related costs associated with these services, including stock-based compensation; third-party consultant fees; and allocated overhead.

Advertising Costs

Advertising costs are expensed as incurred. Advertising expense was $26.4 million, $13.7 million and $8.3 million for the years ended January 31, 2018, 2019 and 2020, respectively.

Research and Development

Research and development expenses consist primarily of employee-related costs for the design and development of the Company's platform, contractor costs to supplement staff levels, third-party web services, consulting services, and allocated overhead. Research and development expenses, other than software development costs qualifying for capitalization, are expensed as incurred.

Stock-Based Compensation

The Company has granted stock-based awards, consisting of stock options and restricted stock units, to its employees, certain consultants and certain members of its board of directors. The Company records stock-based compensation based on the grant date fair value of the awards, which include stock options and restricted stock units, and recognizes the fair value of those awards as expense using the straight-line method over the requisite service period of the award. For restricted stock units that contain performance conditions, the Company recognizes expense using the accelerated attribution method if it is probable the performance conditions will be met. The Company estimates the grant date fair value of stock options using the Black-Scholes option-pricing model.

Stock-based compensation expense related to purchase rights issued under the 2018 Employee Stock Purchase Plan (ESPP) is based on the Black-Scholes option-pricing model fair value of the estimated number of awards as of the beginning of the offering period. Stock-based compensation expense is recognized using the straight-line method over the offering period.

The determination of the grant date fair value of stock-based awards is affected by the estimated fair value of the Company's common stock as well as other assumptions and judgments, which are estimated as follows:

- *Fair Value Per Share of Common Stock*. Because there was no public market for the Company's common stock prior to the IPO, the board of directors determined the common stock fair value at the grant date by considering numerous objective and subjective factors, including contemporaneous valuations of the Company’s common stock, actual operating and financial performance, market conditions, and performance of comparable publicly traded companies, business developments, the likelihood of achieving a liquidity event, and transactions involving preferred and common stock, among other factors. Subsequent to the IPO, the Company determines the fair value of common stock as of each grant date using the market closing price of the Company's Class B common stock on the date of grant.

2. Summary of Significant Accounting Policies (Continued)

- *Expected Term*. The expected term is determined using the simplified method, which is calculated as the midpoint of the option's contractual term and vesting period. The Company uses this method due to limited stock option exercise history. For the ESPP, the expected term is the beginning of the offering period to the end of each purchase period.
- *Expected Volatility*. Since a public market for the Company's common stock did not exist prior to the IPO and, therefore, the Company does not have sufficient trading history of its common stock, expected volatility is estimated based on a weighted average of the volatility of similar publicly held companies and the Company's common stock over a period equivalent to the expected term of the awards.
- *Risk-free Interest Rate*. The risk-free interest rate is determined using U.S. Treasury rates with a similar term as the expected term of the option.
- *Expected Dividend Yield*. The Company has never declared or paid any cash dividends and does not presently plan to pay cash dividends in the foreseeable future. Consequently, the Company uses an expected dividend yield of zero.

Income Taxes

The Company accounts for income taxes in accordance with the liability method of accounting for income taxes. Under this method, the Company recognizes a liability or asset for the deferred income tax consequences of all temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements that will result in taxable or deductible amounts in future years when the reported amounts of the assets and liabilities are recovered or settled. These deferred income tax assets or liabilities are measured using the enacted tax rates that will be in effect when the differences are expected to affect taxable income.

Valuation allowances are provided when it is more-likely-than-not that some or all of the deferred income tax assets may not be realized. In assessing the need for a valuation allowance, the Company has considered its historical levels of income, expectations of future taxable income and ongoing tax planning strategies. Because of the uncertainty of the realization of its deferred tax assets, the Company has a full valuation allowance for domestic net deferred tax assets, including net operating loss carryforwards, and tax credits related primarily to research and development. Realization of its deferred tax assets is dependent primarily upon future U.S. taxable income.

Tax positions are recognized in the consolidated financial statements when it is more-likely-than-not the position will be sustained upon examination by the tax authorities. The Company's policy for recording interest and penalties related to income taxes, including uncertain tax positions, is to record such items as a component of the provision for income taxes.

Concentrations of Risk and Significant Customers

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments and accounts receivable. Cash denominated in currencies other than the United States dollar represented 3% and 9% of total cash, cash equivalents and short-term investments as of January 31, 2019 and January 31, 2020, respectively.

The Company maintains its cash accounts with financial institutions where, at times, deposits exceed federal insured limits. The Company invests its excess cash in money market funds and in short-term investments consisting of highly-rated debt securities.

No single customer accounted for more than 10% of revenue for the years ended January 31, 2018, 2019 and 2020 or more than 10% of accounts receivable as of January 31, 2019 and January 31, 2020.

The Company is primarily dependent upon third parties in order to meet the uptime and performance requirements of its customers. Any disruption of or interference with the Company's use of these third parties would impact operations.

Net Loss per Share

The Company computes net loss per share using the two-class method required for multiple classes of common stock and participating securities. The rights, including the liquidation and dividend rights, of the Class A common stock and Class B common stock are substantially identical, other than voting rights. Accordingly, the Class A common stock and Class B common

2. Summary of Significant Accounting Policies (Continued)

stock share equally in the Company’s net losses. Before the IPO, the Company’s participating securities also included convertible preferred stock. The holders of convertible preferred stock did not have a contractual obligation to share in the Company’s losses, and as a result net losses were not allocated to these participating securities.

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding during the period. Diluted net loss per share is computed by dividing net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period increased by common shares that could be issued upon conversion or exercise of other outstanding securities to the extent those additional common shares would be dilutive. The dilutive effect of potentially dilutive securities is reflected in diluted net loss per share by application of the treasury stock method. During periods when the Company is in a net loss position, basic net loss per share is the same as diluted net loss per share as the effects of potentially dilutive securities are anti-dilutive.

Recently Issued Accounting Pronouncements

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which requires lessees to record most leases on the balance sheet and recognize the expenses on the income statement in a manner similar to current practice. ASU 2016-02 states that a lessee would recognize a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The Company expects to adopt this standard as of February 1, 2020 using the modified retrospective transition method with the option to recognize a cumulative-effect adjustment at the date of adoption. Upon adoption, the Company expects to elect the transition package of practical expedients permitted within the new standard, which among other things, allows the carryforward of the historical lease classification. The Company continues to evaluate which other, if any, practical expedients will be elected.

The Company is in the final stages of completing its review of historical lease contracts to quantify the expected impact of adoption on its consolidated financial statements. To illustrate the magnitude of this change, the remaining amounts payable under the Company's off-balance sheet operating leases at January 31, 2020 is disclosed in Note 11, "Commitments and Contingencies." Beginning on February 1, 2020, the remaining amounts payable under the Company's operating leases, excluding those with terms less than 12 months, will be discounted and recorded as right-of-use assets and lease liabilities on its consolidated balance sheet. The Company does not anticipate that the adoption of this standard will have a material impact on its consolidated statements of operations or statements of cash flows.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments-Credit Losses (Topic 326)*, which requires the measurement and recognition of expected credit losses for certain financial instruments, which includes the Company's accounts receivable and available-for-sale debt securities. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will result in more timely recognition of credit losses. For available-for-sale debt securities, credit losses should be recorded through an allowance for credit losses. The Company expects to adopt this standard for the year ending January 31, 2021. The standard requires a cumulative effect adjustment to the balance sheet as of the beginning of the first reporting period in which the guidance is effective. The Company is evaluating the impact of the adoption of ASU 2016-13 on its consolidated financial statements.

3. Cash, Cash Equivalents and Short-Term Investments

The amortized cost, unrealized gain (loss) and estimated fair value of the Company’s cash equivalents and short-term investments as of January 31, 2019 and January 31, 2020 were as follows (in thousands):

	January 31, 2019			
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value
Cash	$ 5,975	$ —	$ —	$ 5,975
Cash equivalents:				
Money market funds	170,998	—	—	170,998
Total cash and cash equivalents	$ 176,973	$ —	$ —	$ 176,973

3. Cash, Cash Equivalents and Short-Term Investments (Continued)

	January 31, 2020			
	Amortized Cost	Unrealized Gain	Unrealized Loss	Estimated Fair Value
Cash	$ 10,375	$ —	$ —	$ 10,375
Cash equivalents:				
Money market funds	45,654	—	—	45,654
Certificates of deposit	15,021	—	—	15,021
Reverse repurchase agreements	4,200	—	—	4,200
Commercial paper	4,093	—	—	4,093
Corporate debt securities	1,500	—	—	1,500
Total cash and cash equivalents	$ 80,843	$ —	$ —	$ 80,843
Short-term investments:				
Commercial paper	$ 10,567	$ —	$ —	$ 10,567
U.S. treasury securities	4,999	1	—	5,000
Asset-backed securities	2,399	1	—	2,400
Total short-term investments	17,965	2	—	17,967
Total cash, cash equivalents and short-term investments	$ 98,808	$ 2	$ —	$ 98,810

All short-term investments were designated as available-for-sale securities and had contractual maturities due within less than one year as of January 31, 2020. The Company had no short-term investments as of January 31, 2019.

There were no material gross unrealized gains or losses from available-for-sale securities and no realized gains or losses from available-for-sale securities that were reclassified out of accumulated other comprehensive income for the year ended months ended January 31, 2020.

For available-for-sale debt securities that have unrealized losses, the Company evaluates whether (1) it has the intention to sell any of these investments and (2) whether it is not more likely than not that it will be required to sell any of these available-for-sale debt securities before recovery of the entire amortized cost basis. Based on this evaluation, the Company determined that there were no other-than-temporary impairments associated with short-term investments as of January 31, 2020.

4. Fair Value Measurements

Assets Measured at Fair Value on a Recurring Basis

Financial instruments recorded at fair value in the financial statements are categorized as follows:

- Level 1: Observable inputs that reflect quoted prices for identical assets or liabilities in active markets.
- Level 2: Observable inputs, other than Level 1 prices, 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 reflecting management's assumptions incorporated in valuation techniques used to determine fair value. These assumptions are required to be consistent with market participant assumptions that are reasonably available.

4. Fair Value Measurements (Continued)

The following table summarizes the assets measured at fair value on a recurring basis as of January 31, 2019 and January 31, 2020 by level within the fair value hierarchy (in thousands):

	January 31, 2019			
	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ 170,998	$ —	$ —	$ 170,998

	January 31, 2020			
	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ 45,654	$ —	$ —	$ 45,654
Certificates of deposit	—	15,021	—	15,021
Reverse repurchase agreements	—	4,200	—	4,200
Commercial paper	—	4,093	—	4,093
Corporate debt securities	—	1,500	—	1,500
Total cash equivalents	$ 45,654	$ 24,814	$ —	$ 70,468
Short-term investments:				
Commercial paper	$ —	$ 10,567	$ —	$ 10,567
U.S. treasury securities	5,000	—	—	5,000
Asset-backed securities	—	2,400	—	2,400
Total short-term investments	5,000	12,967	—	17,967
Total cash equivalents and short-term investments	$ 50,654	$ 37,781	$ —	$ 88,435

During the years ended January 31, 2019 and 2020, the Company had no transfers between levels of the fair value hierarchy of its assets and liabilities measured at fair value.

Fair Value of Other Financial Instruments

The carrying amounts of certain financial instruments, including cash held in banks, accounts receivable, accounts payable, accrued liabilities, and other liabilities approximate fair value due to their short-term maturities and are excluded from the fair value tables above.

5. Property and Equipment

Property and equipment, net consisted of the following (in thousands):

	As of January 31,	
	2019	2020
Capitalized internal-use software development costs	18,140	24,305
Computer equipment and software	$ 16,575	$ 4,714
Leasehold improvements	2,849	1,155
Furniture, vehicles and office equipment	2,537	836
	40,101	31,010
Less accumulated depreciation and amortization	(27,506)	(18,194)
	$ 12,595	$ 12,816

5. Property and Equipment (Continued)

Depreciation and amortization expense related to property and equipment was $8.1 million, $8.6 million and $6.3 million for the years ended January 31, 2018, 2019 and 2020, respectively.

The Company capitalized $2.2 million, $6.3 million and $6.5 million in software development costs during the years ended January 31, 2018, 2019 and 2020, respectively. Amortization of capitalized software development costs was $3.2 million, $3.9 million and $3.7 million for the years ended January 31, 2018, 2019 and 2020, respectively.

6. Intangible Assets

Intangible assets consisted of the following (in thousands):

	As of January 31,	
	2019	2020
Intellectual property excluding patents	$ 2,289	$ 2,354
Software licenses	1,603	1,603
Patents	950	950
	4,842	4,907
Less accumulated amortization	(427)	(1,042)
	$ 4,415	$ 3,865

Amortization expense related to intangible assets was $0.1 million, $0.2 million and $0.6 million for the years ended January 31, 2018, 2019 and 2020, respectively. Intellectual property excluding patents is considered an indefinite-lived asset due to the fact that it is renewable in perpetuity. Software licenses are amortized over an estimated useful life of three years. The patents were acquired and are being amortized over a weighted-average remaining useful life of approximately 7 years.

As of January 31, 2020, future amortization expense for definite-lived intangible assets is estimated to be as follows (in thousands):

Year Ending January 31,	
2021	$ 614
2022	481
2023	80
2024	80
2025	80
Thereafter	176
	$ 1,511

7. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	As of January 31,	
	2019	2020
Accrued payroll taxes	$ 12,251	$ 9,915
Accrued bonus	5,338	9,847
Accrued expenses	8,688	8,068
Accrued payroll and benefits	6,142	7,802
Accrued commissions	6,495	4,041
Employee stock purchase plan	3,848	3,016
Sales and other taxes payable	1,409	1,511
Other accrued liabilities	3,968	2,273
	$ 48,139	$ 46,473

8. Deferred Revenue and Performance Obligations

Deferred Revenue

Significant changes in the Company's deferred revenue balance for the years ended January 31, 2018, 2019 and 2020 were as follows (in thousands):

Balance as of January 31, 2017		$ 49,936
Revenue recognized that was included in the deferred revenue balance at the beginning of the period:		
Subscription	$ (42,383)	
Professional services and other	(6,079)	
Total		(48,462)
Increase due to billings excluding amounts recognized as revenue during the period		69,482
Balance as of January 31, 2018		70,956
Revenue recognized that was included in the deferred revenue balance at the beginning of the period:		
Subscription	$ (61,283)	
Professional services and other	(4,991)	
Total		(66,274)
Increase due to billings excluding amounts recognized as revenue during the period		89,220
Balance as of January 31, 2019		93,902
Revenue recognized that was included in the deferred revenue balance at the beginning of the period:		
Subscription	$ (83,441)	
Professional services and other	(5,252)	
Total		(88,693)
Increase due to billings excluding amounts recognized as revenue during the period		104,535
Balance as of January 31, 2020		$ 109,744

8. Deferred Revenue and Performance Obligations (Continued)

Transaction Price Allocated to Remaining Performance Obligations

Transaction price allocated to remaining performance obligations represents the remaining amount of revenue the Company expects to recognize from existing noncancelable contracts, whether billed or unbilled. As of January 31, 2020, approximately $218.3 million of revenue was expected to be recognized from remaining performance obligations for subscription contracts. The Company expects to recognize approximately $134.0 million of this amount during the year ending January 31, 2021, with an additional $54.4 million being recognized during the year ending January 31, 2022, and the balance recognized thereafter. As of January 31, 2020, approximately $14.6 million of revenue was expected to be recognized from remaining performance obligations for professional services and other contracts, $11.1 million of which is expected to be recognized during the year ending January 31, 2021, and the balance recognized thereafter.

9. Geographic Information

Revenue by geographic area is determined by the billing address of the customer. The following table sets forth revenue by geographic area (in thousands):

	Year Ended January 31,		
	2018	2019	2020
United States	$ 88,748	$ 110,181	$ 130,044
Japan	7,164	12,258	17,334
Other	12,612	20,025	26,017
Total	$ 108,524	$ 142,464	$ 173,395
Percentage of revenue by geographic area:			
United States	82%	77%	75%
Japan	7%	9%	10%
Other	11%	14%	15%

Other than the United States and Japan, no other individual country exceeded 10% of total revenue for the years ended January 31, 2018, 2019 and 2020. As of January 31, 2020, substantially all of the Company’s property and equipment was located in the United States.

10. Credit Facility

In December 2017, the Company entered into an $80.0 million credit facility and drew $50.0 million at closing, which was scheduled to mature on January 1, 2021. In April 2018, the Company entered into an amendment to this credit facility pursuant to which the Company was able to incur an additional $20.0 million in term loan borrowings, for a total availability of $100.0 million under the amended facility. The Company drew the remaining $50.0 million during April 2018, which was scheduled to mature on May 1, 2021. The credit facility is secured by substantially all of the Company's assets.

Under the amended credit facility, the Company was required to pay a $2.0 million fee upon the earlier of (1) the closing of a transaction in which the Company was acquired by a third party and (2) December 4, 2027. The obligation to pay this $2.0 million fee terminated upon the closing of the IPO.

In January 2019, the Company entered into an amendment to this credit facility which extended the maturity date for both outstanding loans to October 1, 2022. The amendment also revised the maximum debt ratio financial covenant and increased the amount of the closing fee.

Each term loan under the credit facility requires interest-only payments until the maturity date. A portion of the interest that accrues on the outstanding principal of each term loan is payable in cash on a monthly basis, which portion accrues at a floating rate equal to the greater of (1) 7% and (2) three-month LIBOR plus 5.5% per year. This interest rate was approximately 7.4% as of January 31, 2020. In addition, a portion of the interest that accrues on the outstanding principal of each term loan is capitalized and added to the principal amount of the outstanding term loan on a monthly basis, which portion accrues at a fixed rate equal to 2.5% per year. There was $0.2 million, $2.3 million and $2.6 million of interest capitalized during the years ended January 31, 2018, 2019 and 2020, respectively.

10. Credit Facility (Continued)

The amended credit facility requires a closing fee of $7.0 million to be paid on the earliest of (1) the date the term loan is prepaid, (2) the term loan maturity date, which is October 1, 2022, and (3) the date the term loan becomes due and payable. Due to the long-term nature of the closing fee, it was recorded at present value as an increase to other liabilities, noncurrent and an increase to debt issuance costs. The closing fee liability will be accreted to its full value over the term of the loan, with such accretion recorded as interest expense in other expense, net in the consolidated statements of operations. Debt issuance costs are presented as an offset to the outstanding principal balance of the term loans on the consolidated balance sheets and are being amortized as interest expense in other expense, net in the consolidated statements of operations over the term of the loan using the effective interest rate method.

The balances in long-term debt consisted of the following:

	As of January 31,	
	2019	2020
Principal	$ 102,494	$ 105,123
Less: unamortized debt issuance costs	(5,249)	(4,049)
Net carrying amount	$ 97,245	$ 101,074

The $100.0 million credit facility as amended contains customary conditions to borrowing, events of default and covenants, including covenants that restrict the Company's ability to dispose of assets, make material changes to the nature, control or location of the business, merge with or acquire other entities, incur indebtedness or encumbrances, make distributions to holders of the Company's capital stock, make certain investments or enter into transactions with affiliates. In addition, the Company is required to comply with a financial covenant based on the ratio of outstanding indebtedness to annualized recurring revenue. Under the amended facility, the maximum ratio is 0.75 on January 31, 2020 and April 30, 2020; 0.70 on July 31, 2020 and October 31, 2020; 0.65 on January 31, 2021 and April 30, 2021; and 0.60 on July 31, 2021 through the maturity date. The credit facility defines annualized recurring revenue as four times the Company's aggregate revenue for the immediately preceding quarter (net of recurring discounts and discounts for periods greater than one year) less the annual contract value of any customer contracts pursuant to which the Company was advised during such quarter would not be renewed at the end of the current term plus annual contract value of existing customer contract increases during such quarter. This covenant is measured quarterly on a three-month trailing basis. Upon the occurrence of an event of default, such as non-compliance with covenants, any outstanding principal, interest and fees become due immediately. The Company was in compliance with the covenant terms of the credit facility at January 31, 2019 and January 31, 2020.

The Company incurred interest expense of $1.2 million, $11.1 million and $12.6 million for the years ended January 31, 2018, 2019 and 2020, respectively.

Stock Warrants

In connection with the credit facility described above, in December 2017 the Company issued fully vested warrants to purchase 28,462 shares of Series D-2 convertible preferred stock (Series D-2 warrants) with an exercise price of $126.47 per share. The fair value of the Series D-2 warrants at the time of issuance was recorded as an increase to debt issuance costs. In connection with the April 2018 amendment, the Series D-2 warrants were amended to warrants to purchase 66,664 shares of Class B common stock with an exercise price of $45.00 per share (common warrants). Upon execution of the April 2018 amendment, unamortized debt issuance costs related to the Series D-2 warrants were adjusted based on the difference in fair value of the Series D-2 warrants and the common warrants at the time of the April 2018 amendment. In connection with the January 2019 amendment to the credit facility, the common warrants were amended to be exercisable for an aggregate of 125,000 shares of Class B common stock at an exercise price of $17.8736 per share (amended common warrants). Upon execution of the January 2019 amendment, unamortized debt issuance costs related to the common warrants were adjusted based on the difference in fair value of the common warrants and the amended common warrants at the time of the January 2019 amendment. See Note 12 for further details regarding stock warrants.

11. Commitments and Contingencies

Litigation

Liabilities for loss contingencies arising from claims, assessments, litigation, fines, and penalties and other sources are recorded when it is probable that a liability has been incurred and the amount can be reasonably estimated. Legal costs incurred in connection with loss contingencies are expensed as incurred.

In October and November 2019, securities class action complaints were filed by certain stockholders of the Company against the Company, certain of the Company's current and former officers and directors, and the underwriters of the Company's June 2018 initial public offering alleging violations of securities laws and seeking unspecified damages. The Company believes these lawsuits are without merit and intends to defend the cases vigorously. The Company is unable to estimate a range of loss, if any, that could result were there to be an adverse final decision in these cases. If an unfavorable outcome were to occur in these cases, it is possible that the impact could be material to the Company's results of operations in the period(s) in which any such outcome becomes probable and estimable.

The Company is involved in other legal proceedings from time to time arising in the normal course of business. Management believes that the outcome of these proceedings will not have a material impact on the Company’s financial condition, results of operations, or liquidity.

Warranties and Indemnification

The Company’s subscription services are generally warranted to perform materially in accordance with the terms of the applicable customer service order under normal use and circumstances. Additionally, the Company’s arrangements generally include provisions for indemnifying customers against liabilities if its subscription services infringe a third party’s intellectual property rights. Furthermore, the Company may also incur liabilities if it breaches the security or confidentiality obligations in its arrangements. To date, the Company has not incurred significant costs and has not accrued a liability in the accompanying consolidated financial statements as a result of these obligations.

The Company has entered into service-level agreements with some of its customers defining levels of uptime reliability and performance and permitting those customers to receive credits for prepaid amounts related to unused subscription services if the Company fails to meet certain of the defined service levels. In very limited instances, the Company allows customers to early terminate their agreements if the Company repeatedly or significantly fails to meet those levels. If the Company repeatedly or significantly fails to meet contracted upon service levels, a contract may require a refund of prepaid unused subscription fees. To date, the Company has not experienced any significant failures to meet defined levels of uptime reliability and performance as set forth in its agreements and, as a result, the Company has not accrued any liabilities related to these agreements in the consolidated financial statements.

Operating Leases

The Company has entered into noncancelable operating lease arrangements, primarily for office space, with various expiration dates through 2027. Certain of the leases include periods of free rent beginning with the lease effective date and increasing rental rates over the term of the leases. The Company recognizes rent expense on a straight-line basis over the lease period and has accrued for rent expense incurred but not paid. Rent expense under operating leases totaled $5.3 million, $7.1 million and $6.9 million for the years ended January 31, 2018, 2019 and 2020, respectively.

11. Commitments and Contingencies (Continued)

Future minimum lease payments under noncancelable operating leases were as follows as of January 31, 2020 (in thousands):

	Total Payments	Expected Sublease Income	Net Payments
Year Ending January 31:			
2021	$ 6,926	$ (566)	$ 6,360
2022	4,498	(474)	4,024
2023	1,801	(265)	1,536
2024	1,198	—	1,198
2025	1,230	—	1,230
Thereafter	3,780	—	3,780
	$ 19,433	$ (1,305)	$ 18,128

Other Purchase Commitments

The Company has also entered into certain noncancelable contractual commitments related to cloud infrastructure services in the ordinary course of business. As of January 31, 2020, the Company had noncancelable commitments related to these services with a term of 12 months or longer of $56.0 million.

12. Stockholders' Equity (Deficit)

Preferred Stock

The Company's Board of Directors has the authority, without further action by the Company's stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, and privileges thereof, including voting rights. As of January 31, 2019 and January 31, 2020, no shares of preferred stock were issued and outstanding.

Common Stock

The Company has two classes of common stock, Class A and Class B. Each share of Class A common stock is entitled to 40 votes per share and is convertible at any time into one share of Class B common stock. Each share of Class A common stock will convert automatically into one share of Class B common stock upon any transfer, whether or not for value. Each share of Class B common stock is entitled to one vote per share. Holders of Class A common stock and Class B common stock vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law or the Company's certificate of incorporation. Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of Class A common stock and Class B common stock are entitled to receive dividends, if any, as may be declared by the Company's board of directors.

At January 31, 2019 and January 31, 2020, there were 3,263,659 shares of Class A common stock authorized. At January 31, 2019 and January 31, 2020, there were 3,263,659 shares of Class A common stock issued and outstanding.

At January 31, 2019 and January 31, 2020, there were 500,000,000 shares of Class B common stock authorized. At January 31, 2019 and January 31, 2020, there were 23,434,542 and 24,985,698 shares of Class B common stock issued and outstanding, respectively.

Class B Common Stock Warrants

In connection with the amendment to the credit facility that occurred in April 2018, the warrants to purchase 28,462 shares of Series D-2 convertible preferred stock described in Note 10 were amended to warrants to purchase 66,664 shares of Class B common stock at an exercise price equal to $45.00 per share. The warrants are exercisable at any time prior to expiration, which was to occur on the earlier of the third anniversary of the IPO or December 2027. Due to the exercise price-related contingency that existed with the Class B common stock warrants, they were being accounted for as a liability and were included in other liabilities, noncurrent on the consolidated balance sheets. The liability was revalued each reporting period until the contingency was resolved and the change in fair value was recorded in other expense, net. The contingency was resolved on the effective

12. Stockholders' Equity (Deficit) (Continued)

date of the Company's IPO, at which time the liability was remeasured to fair value and the remaining liability balance was reclassified to additional paid-in capital within stockholders' equity.

In connection with the January 2019 amendment to the credit facility, the warrants to purchase 66,664 shares of Class B common stock were amended to be exercisable for an aggregate of 125,000 shares of Class B common stock at an exercise price of $17.8736 per share. The warrants are exercisable at any time prior to expiration, which occurs on June 28, 2021 (the third anniversary of the IPO). The difference in the fair value of the Class B common stock warrants at the time of the amendment to the credit facility in January 2019 associated with the increase in shares and the lower exercise price was recorded as an adjustment to additional paid-in capital and debt issuance costs.

In connection with a line of credit signed in July 2016, the Company issued a warrant to purchase 3,333 shares of Class B common stock with a strike price of $34.35 per share. The warrant expires ten years from the date of issuance.

In connection with a loan signed in November 2011 and for which the last principal payment was made in September 2015, the Company issued a warrant to purchase 3,729 shares of Class B common stock with a strike price of $4.80 per share. The warrant expires ten years from the date of issuance. This warrant was net exercised in February 2019, resulting in the issuance of 3,130 shares of Class B common stock.

In summary, as of January 31, 2020, there were 128,333 shares of Class B common stock subject to issuance under outstanding warrants, which are exercisable at prices ranging from $17.8736 to $34.35 per share.

13. Equity Incentive Plans

In April 2011, the Company established the 2011 Equity Incentive Plan (2011 Plan), which was amended in September 2011 to provide for the issuance of stock options and other stock-based awards. In June 2018, the Company adopted the 2018 Equity Incentive Plan (2018 Plan). The 2018 Plan provides for the grant of incentive and nonstatutory stock options, restricted stock, RSUs, stock appreciation rights, performance units, and performance shares to employees, consultants, and members of the Company's board of directors.

The number of shares available for issuance under the 2018 Plan includes an annual increase on the first day of each fiscal year equal to the least of: (1) 3,500,000 shares; (2) 5% of the outstanding shares of Class A and Class B common stock as of the last day of the immediately preceding fiscal year; and (3) such other amount as the Company's board of directors may determine no later than the last day of the immediately preceding year. During the year ended January 31, 2020, the number of shares available for grant under the 2018 Plan was increased by 1,334,910 shares. As of January 31, 2020, there were 5,022,271 shares available for grant under the 2018 Plan.

In connection with the IPO, the 2011 Plan was terminated. With the establishment of the 2018 Plan, the Company no longer grants equity-based awards under the 2011 Plan and any shares that expire, terminate, are forfeited or repurchased by the Company, or are withheld by the Company to cover tax withholding obligations, under the 2011 Plan, will become available for future grant under the 2018 Plan.

The Company recognized stock-based compensation expense related to its equity incentive plans as follows (in thousands):

	Year Ended January 31,		
	2018	2019	2020
Cost of revenue:			
Subscription	$ 48	$ 219	$ 507
Professional services and other	40	154	404
Sales and marketing	1,845	7,387	10,770
Research and development	2,311	6,519	6,339
General and administrative	5,090	7,492	5,637
Interest expense	36	30	190
Total	$ 9,370	$ 21,801	$ 23,847

13. Equity Incentive Plans (Continued)

Stock Options

Stock options typically vest over a four year period and have a term of ten years from the date of grant. The weighted-average grant-date fair value of stock options granted was $13.20 and $14.95 per share for the years ended January 31, 2018 and 2020, respectively. There were 161,715, 0, and 25,000 stock options granted during the years ended January 31, 2018, 2019 and 2020, respectively. The grant-date fair value of stock options was estimated using the Black-Scholes option-pricing model with the following weighted-average assumptions:

	Year Ended January 31,		
	2018	2019	2020
Expected stock price volatility	47 %	—	47 %
Expected life of options	6 years	—	6 years
Risk-free interest rate	1.83 %	—	2.47 %
Expected dividend yield	—	—	—
Fair value of common stock	$28.20	—	$31.20

The following table sets forth the outstanding common stock options and related activity for the years ended January 31, 2018, 2019 and 2020:

	Shares Subject to Outstanding Options	Weighted- Average Exercise Price per Share	Weighted-Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding as of January 31, 2017	2,542,025	$ 21.72	7.3	$ 19,377
Granted	161,715	28.20		
Exercised	(111,688)	12.00		
Forfeited	(102,828)	35.79		
Expired	(23,982)	31.63		
Outstanding as of January 31, 2018	2,465,242	21.90	6.4	12,185
Exercised	(367,991)	6.09		
Forfeited	(101,782)	30.69		
Expired	(139,130)	34.06		
Outstanding as of January 31, 2019	1,856,339	23.64	5.6	8,443
Exercised	(94,603)	16.99		
Forfeited	(11,010)	28.24		
Expired	(30,311)	33.64		
Outstanding as of January 31, 2020	1,745,415	$ 23.91	4.6	$ 5,152
Vested and exercisable at January 31, 2020	1,687,606	$ 23.72	4.5	$ 5,152

The aggregate intrinsic value of options exercised was $2.5 million, $4.5 million and $1.6 million for the years ended January 31, 2018, 2019 and 2020, respectively. The intrinsic value represents the excess of the estimated fair value of the Company's common stock on the date of exercise over the exercise price of each option. The intrinsic value of options as of January 31, 2020 is based on the market closing price of the Company's Class B common stock on that date.

As of January 31, 2020, there was $0.7 million of unrecognized stock-based compensation expense related to outstanding stock options which is expected to be recognized over a weighted-average period of 1.3 years.

13. Equity Incentive Plans (Continued)

Restricted Stock Units

Restricted stock units (RSUs) granted under the Plan vest and settle upon the satisfaction of a service-based condition and, for RSUs granted prior to the IPO, a liquidity event-related performance vesting condition. The service-based condition for these awards is generally satisfied over three or four years with a cliff vesting period of one or two years and quarterly vesting thereafter. Some RSUs have a two-year vesting schedule, with one third of the RSUs vesting at twelve, eighteen, and twenty-four months. Upon the effectiveness of the registration statement for the Company's IPO, which was June 28, 2018, the liquidity event-related performance vesting condition associated with RSUs granted prior to the IPO was deemed probable of being satisfied.

The following table sets forth the outstanding RSUs and related activity for the years ended January 31, 2018, 2019 and 2020:

	Number of Shares	Weighted- Average Grant Date Fair Value
Outstanding as of January 31, 2017	33,666	$ 27.60
Granted	988,601	23.40
Canceled	(21,041)	27.60
Outstanding as of January 31, 2018	1,001,226	23.40
Granted	1,743,393	18.06
Vested	(12,625)	27.60
Canceled	(403,872)	21.29
Outstanding as of January 31, 2019	2,328,122	19.77
Granted	1,113,913	28.82
Vested	(982,591)	21.76
Canceled	(282,639)	20.52
Outstanding as of January 31, 2020	2,176,805	$ 23.40

As of January 31, 2020, there was $36.9 million of unrecognized stock-based compensation expense related to outstanding RSUs which is expected to be recognized over a weighted-average period of 2.6 years.

Employee Stock Purchase Plan

In June 2018, the Company's board of directors adopted the ESPP. The number of shares of Class B common stock available for issuance under the ESPP increases on the first day of each fiscal year equal to the least of: (1) 1,050,000 shares of Class B common stock, (2) 1.5% of the outstanding shares of Class A and Class B common stock of the Company on the last day of the immediately preceding fiscal year, and (3) such other amount as the administrator of the ESPP may determine on or before the last day of the immediately preceding year. During the year ended January 31, 2020, the number of shares available under the ESPP was increased by 400,473. As of January 31, 2020, there were 941,879 shares available under the ESPP.

The ESPP generally provides for consecutive overlapping 24-month offering periods comprised of four six-month purchase periods; provided, however, that the first purchase period in the first offering period will have a duration of approximately nine months. The offering periods are scheduled to start on the first trading day on or after April 1 and October 1 of each year. The first offering period commenced on June 29, 2018 and is scheduled to end on the first trading day on or after October 1, 2020. The ESPP is intended to qualify as a tax-qualified plan under Section 423 of the Internal Revenue Code and permits participants to elect to purchase shares of Class B common stock through payroll deductions of up to 15% of their eligible compensation. A participant may purchase a maximum of 2,000 shares during each purchase period.

Amounts deducted and accumulated by the participant will be used to purchase shares of Class B common stock at the end of each purchase period. The purchase price of the shares will be 85% of the lower of the fair market value of Class B common stock on the first trading day of each offering period or the fair market value of Class B common stock on the applicable exercise date. If the fair market value of a share of Class B common stock on the exercise date of an offering period is less than it was on the first trading day of that offering period, participants automatically will be withdrawn from that offering period following

13. Equity Incentive Plans (Continued)

their purchase of shares on the exercise date and will be re-enrolled in a new 24-month offering period. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of Class B common stock. Participation ends automatically upon termination of employment.

As of January 31, 2020, a total of 1,202,243 shares were issuable to employees based on contribution elections made under the ESPP and 506,278 shares had been purchased. As of January 31, 2020, total unrecognized stock-based compensation related to the ESPP was $5.0 million, which is expected to be recognized over a weighted-average period of 1.3 years.

The fair value of the purchase rights for the ESPP are estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions:

	June 2018	April 2019	October 2019
Expected stock price volatility	31% - 36%	43% - 52%	44% - 49%
Expected term	0.75 - 2.25 years	0.5 - 2.0 years	0.5 - 2.0 years
Risk-free interest rate	2.22% - 2.54%	2.33% - 2.46%	1.56% - 1.81%
Expected dividend yield	–	–	–

14. Income Taxes

The components of the income tax provision were as follows (in thousands):

	Year Ended January 31,		
	2018	2019	2020
Current income provision:			
Federal	$ —	$ —	$ —
State	3	9	27
Foreign	233	1,137	739
	236	1,146	766
Deferred income tax provision:			
Federal	(32)	(125)	—
State	12	(39)	—
Foreign	169	266	(12)
	149	102	(12)
Provision for income taxes	$ 385	$ 1,248	$ 754

14. Income Taxes (Continued)

Total income tax expense differed from the amounts computed by applying the U.S. federal income tax rate to income before income tax expense as a result of the following (in thousands):

	Year Ended January 31,		
	2018	2019	2020
Tax benefit at U.S. federal statutory rate (1)	$ (57,992)	$ (32,143)	$ (26,229)
State income taxes, net of federal tax benefit	(11,679)	(10,114)	(5,377)
Non-deductible expenses	1,095	997	1,101
Foreign taxes	48	697	113
Stock-based compensation	896	1,469	895
Research and development credits	(2,516)	(2,618)	(2,529)
Change in valuation allowance	(15,199)	42,975	32,708
Deferred tax effect of Tax Act rate change	85,725	—	—
Other	7	(15)	72
Provision for income taxes	$ 385	$ 1,248	$ 754

(1) The statutory tax rates used in this analysis were 33%, 21%, and 21% for the years ended January 31, 2018, 2019 and 2020, respectively.

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and liabilities were as follows (in thousands):

	As of January 31,	
	2019	2020
Deferred tax assets:		
Net operating loss carryforwards	$ 223,765	$ 248,583
Stock based compensation	9,784	13,608
Accruals and other reserves	4,222	4,095
Research and development credit carryforwards	12,729	15,257
Other	5,229	7,398
Gross deferred tax assets	255,729	288,941
Valuation allowance	(246,679)	(279,387)
Total deferred tax assets, net of valuation allowance	9,050	9,554
Deferred tax liabilities:		
Contract acquisition costs	(6,987)	(7,057)
Capitalized software	(2,581)	(3,074)
Basis difference in intangible assets	(297)	(202)
Total deferred tax liabilities	(9,865)	(10,333)
Net deferred tax liabilities	$ (815)	$ (779)

In assessing whether deferred tax assets should be recognized, the Company considered whether it is more-likely-than-not that some portion or all of the deferred tax assets would be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The Company considered the scheduled reversal of deferred tax liabilities, projected future taxable income, and tax planning strategies in making this assessment. The Company determined it was more-likely-than-not that its domestic deferred tax assets would

14. Income Taxes (Continued)

not be realized as of January 31, 2019 and 2020 and, accordingly, recorded a full valuation allowance. Net deferred tax liabilities are included in other liabilities, noncurrent on the consolidated balance sheets.

In December 2017, the Tax Cuts and Jobs Act (Tax Act) was enacted, which resulted in widespread changes to the U.S. tax code. One such change was establishing a flat corporate income tax rate of 21% to replace previous rates that ranged from 15% to 35%. As a result, the Company remeasured its U.S. deferred tax assets and liabilities as of January 31, 2018 to reflect the lower rate expected to apply when these temporary differences reverse. The remeasurement resulted in a reduction in deferred tax assets of $85.7 million. This was fully offset by a corresponding change to the Company's valuation allowance.

As of January 31, 2020, the Company had federal and state NOLs available to offset future taxable income, if any, of $914.8 million and $1,141.0 million, respectively. The federal NOLs will begin to expire in 2028. The state NOLs will expire depending upon the various rules in the states in which the Company operates. Full realization of the NOLs is dependent on generating sufficient taxable income prior to their expiration. The ability to realize the NOLs and other deferred tax assets could also be limited by previous or future changes in ownership in accordance with rules in Internal Revenue Code Sections 382 and 383.

As of January 31, 2020, the Company also had unused federal and state research and development tax credits of $15.2 million and $6.5 million, respectively. The federal credits begin to expire in 2020 and the state credits began to expire in 2019. As of January 31, 2020, the Company also had foreign tax credits of $0.4 million which begin to expire in 2020.

During the fiscal years ended years ended January 31, 2018, 2019 and 2020, the aggregate changes in the total gross amount of unrecognized tax benefits were as follows (in thousands):

	Year Ended January 31,		
	2018	2019	2020
Beginning balance	$ 2,737	$ 3,637	$ 4,558
Increase in unrecognized tax benefits taken in prior years	675	872	906
Increase (decrease) in unrecognized tax benefits related to current year	225	49	(34)
	$ 3,637	$ 4,558	$ 5,430

The total amount of unrecognized tax benefits that, if recognized, would affect the effective tax rate is zero due to the valuation allowance. The Company does not expect a significant change in its unrecognized tax benefits over the next twelve months.

The Company files U.S. federal, U.S. state, and foreign tax returns and is subject to examination by various taxing authorities for all open tax years. The Company is not currently under audit by the Internal Revenue Service or any other tax authority.

The Company paid income taxes of $0.5 million, $0.8 million and $0.4 million during the years ended years ended January 31, 2018, 2019 and 2020, respectively.

15. Net Loss Per Share

The Company computes net loss per share using the two-class method required for multiple classes of common stock and participating securities. The rights, including the liquidation and dividend rights, of the Class A common stock and Class B common stock are substantially identical, other than voting rights. Accordingly, the Class A common stock and Class B common stock share equally in the Company's net losses. Before the IPO, the Company's participating securities also included convertible preferred stock. The holders of convertible preferred stock did not have a contractual obligation to share in the Company's losses, and as a result net losses were not allocated to these participating securities.

The following table sets forth the calculation of basic and diluted net loss per share during the periods presented. The shares issued in the IPO and the shares of Class A and Class B common stock issued upon conversion of the outstanding shares of convertible preferred stock in the IPO are included in the table below weighted for the period outstanding in the years ended January 31, 2018, 2019 and 2020 (in thousands, except per share amounts):

	Year Ended January 31,					
	2018		2019		2020	
	Class A	Class B	Class A	Class B	Class A	Class B
Numerator:						
Net loss	$ —	$ (176,562)	$ (18,305)	$ (136,004)	$ (14,903)	$ (110,753)
Denominator:						
Weighted-average number of shares used in computing net loss per share, basic and diluted	—	1,595	1,941	14,417	3,264	24,256
Net loss per share, basic and diluted	$ —	$ (110.70)	$ (9.43)	$ (9.43)	$ (4.57)	$ (4.57)

Since the Company was in a loss position for all periods presented, basic net loss per share is the same as diluted net loss per share for all periods as the inclusion of all potential common shares outstanding would have been anti-dilutive. The weighted-average impact of potentially dilutive securities that were not included in the diluted per share calculations because they would be anti-dilutive was as follows (in thousands):

	Year Ended January 31,		
	2018	2019	2020
Convertible preferred stock on an if-converted basis	13,939	5,717	—
Options to purchase common stock	554	470	297
Restricted stock units	—	311	1,096
Employee stock purchase program	—	—	192
Common stock warrants	3	4	42
	14,496	6,502	1,627

16. Employee Benefit Plan

The Company has a defined contribution retirement savings plan qualified under Section 401(k) of the Internal Revenue Code (IRC), which is a pretax savings plan covering substantially all employees. Under the plan, employees may contribute up to 50% of their pretax salary, subject to certain IRC limitations. Employees are eligible to participate beginning on the first day of the month following their first 30 days of employment. The Company recorded expenses for contributions to its retirement savings plan of $3.2 million, $3.4 million and $3.2 million during the years ended January 31, 2018, 2019 and 2020, respectively.

17. Related Party Transactions

Certain members of the Company's board of directors serve as directors of and/or are executive officers of and, in some cases, are investors in, companies that are customers or vendors of the Company. Certain of the Company's executive officers also serve as directors of or serve in an advisory capacity to companies that are customers or vendors of the Company. As of January 31, 2019 and January 31, 2020, the Company had $0.6 million and $0.1 million receivable from these customers,

17. Related Party Transactions (Continued)

respectively. As of January 31, 2019 and January 31, 2020, amounts payable to these vendors were immaterial. During the years ended January 31, 2018, 2019 and 2020, the Company recognized revenue of $1.6 million, $1.9 million and $1.0 million, respectively, related to these customers. During the years ended January 31, 2018, 2019 and 2020, the Company recognized expense of $0.8 million, $0.7 million and $1.0 million, respectively, related to these vendors.

The Company previously utilized an aircraft owned by one of the Company's executive officers on an as-needed basis. This arrangement was terminated in June 2018. The Company recorded expenses related to usage of the aircraft of $0.7 million, $0.3 million and $0 during the years ended January 31, 2018, 2019 and 2020, respectively.

18. Subsequent Events

In March 2020, the Company granted restricted stock units for 1,963,058 shares of Class B common stock pursuant to the 2018 Equity Incentive Plan.

In March 2020, the World Health Organization declared COVID-19 a pandemic. The full impact of the COVID-19 outbreak is inherently uncertain at the time of this report. The COVID-19 outbreak has resulted in travel restrictions and in some cases, prohibitions of non-essential activities, disruption and shutdown of businesses and greater uncertainty in global financial markets.

The Company cannot predict the extent to which the COVID-19 outbreak will negatively impact its business or operating results at this time. In geographies in which the Company or its customers, partners and service providers operate, health concerns as well as political or governmental developments in response to COVID-19 could result in economic, social or labor instability or prolonged contractions in the industries in which the Company's customers or partners operate, slow the sales process, result in customers not purchasing or renewing the Company's products or failing to make payments, and could otherwise have a material adverse effect on the Company's business and results of operations and financial condition.

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 participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the Exchange Act)), as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of such date, our disclosure controls and procedures were effective at a 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 such term is defined under Rule 13a-15(f) and 15d-15(f) under the Exchange Act. We conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on our evaluation, our management concluded that our internal control over financial reporting was effective as of January 31, 2020.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management’s report was not subject to attestation by our independent registered public accounting firm pursuant to rules of the Securities and Exchange Commission for emerging growth companies that permit us to provide only management’s report in this Annual Report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Disclosure Controls and Procedures

Our management, including our principal executive officer and principal financial officer, do not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls is also 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. Due to 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 is incorporated by reference to our Proxy Statement relating to our 2020 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

Our board of directors has adopted a Code of Business Conduct and Ethics, or the Code of Conduct, that applies to all officers, directors and employees, which is available on our website at ir.domo.com under "Governance". The nominating and corporate governance committee of our board of directors is responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website, as required by applicable law or the Nasdaq listing standards.

Item 11. Executive Compensation

The information required by this item is incorporated by reference to our Proxy Statement relating to our 2020 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated by reference to our Proxy Statement relating to our 2020 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated by reference to our Proxy Statement relating to our 2020 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated by reference to our Proxy Statement relating to our 2020 Annual Meeting of Stockholders. The Proxy Statement will be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The following documents are filed as a part of this Annual Report on Form 10-K:

(a) Financial Statements

The information concerning our financial statements, including the Report of Independent Registered Public Accounting Firm required by this item is incorporated by reference herein to the section of this Annual Report on Form 10-K in Item 8, entitled “Consolidated Financial Statements and Supplementary Data.”

(b) Financial Statement Schedules

All schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedules, or because the information required is included in Item 8, entitled “Consolidated Financial Statements and Supplementary Data.”

(c) Exhibits

See the Exhibit Index immediately following the signature page of this Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None.

SIGNATURES

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

DOMO, INC.

Date: April 10, 2020	By:	/s/ Joshua G. James
		Joshua G. James
		Founder and Chief Executive Officer
		(Principal Executive Officer)
Date: April 10, 2020	By:	/s/ Bruce Felt
		Bruce Felt
		Chief Financial Officer
		(Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Joshua G. James and Bruce Felt, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file, any and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorney-in-fact and agents or any of them or their and his or her substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	**Title**	**Date**
/s/ Joshua G. James Joshua G. James	Chief Executive Officer and Director (*Principal Executive Officer*)	April 10, 2020
/s/ Bruce Felt Bruce Felt	Chief Financial Officer (*Principal Accounting and Financial Officer*)	April 10, 2020
/s/ Fraser Bullock Fraser Bullock	Director	April 10, 2020
/s/ Carine S. Clark Carine S. Clark	Director	April 10, 2020
/s/ Dana Evan Dana Evan	Director	April 10, 2020
/s/ Mark Gorenberg Mark Gorenberg	Director	April 10, 2020
/s/ Daniel Daniel Daniel Daniel	Director	April 10, 2020
/s/ Jeff Kearl Jeff Kearl	Director	April 10, 2020

EXHIBIT INDEX

Exhibit Number	Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Date	
3.1	Amended and Restated Certificate of Incorporation	10-K	001-38553	3.1	April 15, 2019	
3.2	Amended and Restated Bylaws	10-K	001-38553	3.2	April 15, 2019	
4.1	Specimen Common Stock Certificate of the registrant	S-1	333-225348	4.1	June 18, 2018	
4.2	Amended and Restated Investors' Rights Agreement, dated April 13, 2017, by and among the registrant and the investors and founders named therein	S-1	333-225348	4.2	June 1, 2018	
4.3	Warrant to purchase 50,000 shares of Class B common stock, issued to Silicon Valley Bank on July 18, 2016	S-1	333-225348	4.4	June 1, 2018	
4.4	Form of Amended and Restated Warrant to Purchase Stock, dated as of January 4, 2019	8-K	001-38553	4.1	January 7, 2019	
4.5	Description of the registrant's Class B common stock					X
10.1+	Form of Director and Executive Officer Indemnification Agreement	S-1	333-225348	10.1	June 18, 2018	
10.2+	2011 Equity Incentive Plan, as amended	S-1	333-225348	10.2	June 1, 2018	
10.3+	Form of Notice of Stock Option Grant and Stock Option Agreement under the 2011 Equity Incentive Plan and Form of RSU Agreement under the 2011 Equity Incentive Plan	S-1	333-225348	10.3	June 1, 2018	
10.4+	2018 Equity Incentive Plan and forms of agreements thereunder	S-1	333-225348	10.4	June 18, 2018	
10.5+	2018 Employee Stock Purchase Plan	S-1	333-225348	10.5	June 18, 2018	
10.6+	Executive Incentive Compensation Plan	S-1	333-225348	10.6	June 18, 2018	
10.7	Loan and Security Agreement, dated as of December 5, 2017, between the registrant, Wilmington Trust National Association and Obsidian Agency Services, Inc.	S-1	333-225348	10.7	June 1, 2018	
10.8	First Amendment to Loan and Security Agreement and Pledge Agreement dated as of April 17, 2018, between the registrant, Wilmington Trust National Association and Obsidian Agency Services, Inc.	S-1	333-225348	10.8	June 1, 2018	
10.9	Third Amendment to Loan and Security Agreement, dated as of January 4, 2019, by and among Domo, Inc., a Delaware corporation, Domo, Inc., a Utah corporation, the lenders from time to time party thereto, and Obsidian Agency Services Inc.	8-K	001-38553	10.1	January 7, 2019	
10.10+	Form of Change in Control and Severance Agreement	S-1	333-225348	10.9	June 18, 2018	
10.11+	Outside Director Compensation Policy	S-1	333-225348	10.10	June 18, 2018	
10.12	Aircraft Dry Lease Agreement, dated October 15, 2015 between the registrant and JJ Spud LLC	S-1	333-225348	10.11	June 1, 2018	
10.13+	Corrected Confirmatory Employment Letter, dated June 17, 2018, between the registrant and Joshua James	8-K	001-38553	10.1	May 8, 2019	
10.14+	Corrected Confirmatory Employment Letter, dated June 15, 2018, between the registrant and Bruce Felt	8-K	001-38553	10.2	May 8, 2019	
10.15+	Confirmatory Employment Letter, dated June 16, 2018, between the registrant and Catherine Wong	S-1	333-225348	10.14	June 18, 2018	
24.1	Powers of Attorney (contained on signature page)					X
21.1	Subsidiaries of the registrant	S-1	333-225348	21.1	June 1, 2018	
23.1	Consent of Independent Registered Public Accounting Firm					X

31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.	X
32.1*	Certification of Principal Executive Officer and Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X
101.INS	XBRL Instance Document	X
101.SCH	XBRL Taxonomy Extension Schema Linkbase 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

+ Indicates a management contract or compensatory plan.

* The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Domo, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-K, irrespective of any general incorporation language contained in such filing.

Exhibit 4.5

DESCRIPTION OF THE REGISTRANT'S SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of January 31, 2020, we have one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended – our Class B common stock, par value $0.001 per share. These securities are listed on the Nasdaq Global Market under the symbol "DOMO."

The following description of our Class B common stock is a summary and does not purport to be complete. It is qualified in its entirety by, and should be read in conjunction with, our amended and restated certificate of incorporation, amended and restated bylaws, and applicable Delaware law.

Authorized Capital Stock

Our authorized capital stock consists of 513,263,659 shares, of which:

- 3,263,659 shares are designated as Class A common stock, $0.001 par value per share;
- 500,000,000 shares are designated as Class B common stock, $0.001 par value per share; and
- 10,000,000 shares are designated as preferred stock, $0.001 par value per share.

Common Stock

Voting Rights

We currently have two classes of authorized common stock, Class A common stock and Class B common stock. Each share of Class A common stock is entitled to 40 votes per share. Each share of Class B common stock is entitled to one vote per share. Holders of Class A common stock and Class B common stock will vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by law or our certificate of incorporation.

Delaware law could require holders of Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our certificate of incorporation 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 certificate of incorporation in a manner that alters or changes 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.

Our certificate of incorporation and bylaws provide that from and after when the outstanding shares of Class A common stock represent less than a majority of the total combined voting power of our Class A common stock and Class B common stock, or the voting threshold date, we will have a classified board of directors consisting of three classes of approximately equal size, each serving staggered three-year terms. Only the directors in one class will be subject to election by a plurality of the votes cast at each annual meeting of stockholders, with the directors in the other classes continuing for the remainder of their respective three-year terms. Until the voting threshold date, our directors will be elected annually for one-year terms. Stockholders do not have the ability to cumulate votes for the election of directors.

Holders of our Class A common stock and Class B common stock are not entitled to cumulative voting in the election of directors, which means that the holders of a majority of the voting power of our Class A common stock and Class B common stock, voting together as a single voting class, will be entitled to elect all of the directors standing for election, if they so choose.

Because of our dual class structure, we anticipate that, for the foreseeable future, Mr. James will continue to be able to control all matters submitted to our stockholders for approval, including the election and removal of directors.

Our certificate of incorporation provides that the number of authorized shares of common stock or any class of common stock may be increased or decreased (but not below the number of shares of common stock then outstanding and, in the case of the Class B common stock, issuable upon conversion of the outstanding Class A common stock) by the affirmative vote of the holders of a majority of the Class A common stock and Class B common stock, voting together as a single class. Until the final conversion of all outstanding shares of Class A common stock pursuant to the terms of the certificate of incorporation, or the final conversion date, any increase in the authorized shares of Class A common stock requires the approval of the holders of a majority of the outstanding shares of Class A common stock.

Conversion

Each share of Class A common stock will automatically convert into one share of Class B common stock on the final conversion date. Each share of Class A common stock is also convertible at any time at the option of the holder into one share of Class B common stock. In addition, each share of Class A common stock will convert automatically into one share of Class B common stock upon any transfer, whether or not for value, except for certain transfers described in our certificate of incorporation, including, without limitation, transfers for tax and estate planning purposes, so long as the transferring holder of Class A common stock continues to hold exclusive voting and dispositive power with respect to the shares transferred. In addition, each outstanding share of Class A common stock held by a stockholder who is a natural person, or held by the permitted entities and permitted transferees of such natural person (as described in our certificate of incorporation), will convert automatically into one share of Class B common stock upon the death or disability of such natural person nine months following such death or disability, unless otherwise extended in accordance with our certificate of incorporation.

Once converted into a share of Class B common stock, a converted share of Class A common stock will not be reissued. Following the conversion of all outstanding shares of Class A common stock, no further shares of Class A common stock will be issued.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, holders of our Class A common stock and Class B common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds. If a dividend is paid in the form of Class A common stock or Class B common stock, then holders of Class A common stock shall receive Class A common stock and holders of Class B common stock shall receive Class B common stock.

Liquidation

In the event of our liquidation, dissolution or winding up, holders of our Class A common stock and Class B common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then-outstanding shares of preferred stock.

Rights and Preferences

Except as described above, holders of Class A common stock and Class B common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to Class A common stock or Class B common stock. The rights, preferences and privileges of the holders of Class A common stock and Class B common stock are subject to and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are fully paid and nonassessable.

Preferred Stock

Our board of directors has the authority, without further action by the stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, redemption rights, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of such series, any or all of which may be greater than the rights of Class A common stock or Class B common stock. The issuance of preferred stock could adversely affect the voting power of holders of Class A common stock and Class B common stock and the likelihood that such holders will receive dividend payments and payments upon liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing change in our control or other corporate action.

Registration Rights

Certain holders of our Class A common stock and Class B common stock, or their transferees, have the right to require us to register the offer and sale of their shares, which we refer to as registration rights.

Demand Registration Rights

BlackRock Advisors, LLC or any of its affiliates or the holders of at least a majority of the shares having demand registration rights have the right to demand that we use best efforts to file a registration statement for the registration of the offer and sale of at least such number of shares with anticipated offering proceeds in excess of $20.0 million. We are only obligated to file up to two registration statements in connection with the exercise of demand registration rights. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration under certain circumstances and our ability to defer the filing of a registration statement with respect to an exercise of such demand registration rights for up to 90 days under certain circumstances.

Form S-3 Registration Rights

At any time after we are qualified to file a registration statement on Form S-3, a stockholder with registration rights shall have the right to demand that we file a registration statement on Form S-3 so long as the aggregate number of shares to be offered and sold under such registration statement on Form S-3 is at least $5.0 million. These investor registration rights are subject to specified conditions and limitations, including our ability to defer the filing of a registration statement with respect to an exercise of such Form S-3 registration rights for up to 90 days under certain circumstances.

Piggyback Registration Rights

If we propose to register the offer and sale of any of our securities under the Securities Act either for our own account or for the account of other stockholders, a stockholder with registration rights will have the right, subject to certain exceptions, to include their shares of common stock in the registration statement. These registration rights are subject to specified conditions and limitations, including the right of the underwriters to limit the number of shares included in any such registration statement under certain circumstances, but not below 25% of the total number of shares covered by the registration statement.

Expenses of Registration

We will pay all expenses relating to any demand registrations, Form S-3 registrations and piggyback registrations, other than underwriting discounts and selling commissions.

Termination

The registration rights terminate upon the earlier of (1) the date that is three years after the closing of our initial public offering and (2) as to a given holder of registration rights, when such holder of registration rights can sell all of such holder’s registrable securities in a three month-period pursuant to Rule 144 promulgated under the Securities Act.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Section 203 generally prohibits a publicly held Delaware corporation from engaging in a “business combination” with any “interested stockholder” for a period of three years after the date of the transaction in which the person became an interested stockholder, unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to the date of the transaction, the business combination is approved by the board and authorized at an annual or special meeting of stockholders, or by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Certificate of Incorporation and Bylaws

Our certificate of incorporation and our bylaws include a number of provisions that could deter hostile takeovers or delay or prevent changes in control of our board of directors or management team, including the following:

- *Dual-Class Stock*. As described above in "—Common Stock—Voting Rights," our certificate of incorporation provides for a dual-class common stock structure, which provides Joshua James, our founder, chief executive officer and chairman, and his affiliates, with significant influence over matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.
- *Classified Board of Directors*. Our certificate of incorporation and bylaws provide that, from and after the time that the Class A common stock no longer represents a majority of the combined voting power of our Class A common stock and Class B common stock, or the voting threshold date, our board of directors will be classified into three classes of directors. A third party may be discouraged from making a tender offer or otherwise attempting to obtain control of us as it is more difficult and time consuming for stockholders to replace a majority of the directors on a classified board of directors.
- *Stockholder Action; Special Meeting of Stockholders*. Our certificate of incorporation provides that, until the voting threshold date, our stockholders will be able to take action by written consent for any matter. Our bylaws further provide that special meetings of our stockholders may be called only by a majority of our board of directors, the chairman of our board of directors, our chief executive officer or, until the voting threshold date, holders of at least 50% of the combined voting power of our Class A common stock and Class B common stock, thus limiting the ability of a stockholder to call a special meeting. These provisions might delay the ability of our stockholders to force consideration of a proposal or for stockholders controlling a majority of our capital stock to take any action, including the removal of directors.
- *Advance Notice Requirements for Stockholder Proposals and Director Nominations*. Our bylaws provide advance notice procedures for stockholders seeking to bring business before our annual meeting of stockholders or to nominate candidates for election as directors at our annual meeting of stockholders. Our bylaws also specify certain requirements regarding the form and content of a stockholder's notice. These provisions might preclude our stockholders from bringing matters before our annual meeting of stockholders or from making nominations for directors at our annual meeting of stockholders if the proper procedures are not followed. We expect that these provisions may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of our company.
- *No Cumulative Voting*. The Delaware General Corporation Law provides that stockholders are not entitled to cumulate votes in the election of directors unless a corporation's certificate of incorporation provides otherwise. Our certificate of incorporation does not provide for cumulative voting.
- *Amendment of Charter and Bylaws Provisions.* Prior to the voting threshold date, any amendment of our certificate of incorporation will require approval by holders of at least a majority of the voting power of our then outstanding capital stock. From and after the voting threshold date, certain amendments to our certificate of incorporation will require the approval of two-thirds of the outstanding voting power of our common stock. Our bylaws provide that, following the voting threshold date, approval of stockholders holding two-thirds of our outstanding voting power voting as a single class is required for stockholders to amend or adopt any provision of our bylaws.
- *Issuance of Undesignated Preferred Stock.* Our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of undesignated preferred stock with rights and preferences, including voting rights, designated from time to time by our board of directors. The existence of authorized but unissued shares of preferred stock would enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest, or other means.

Exclusive Forum

Our bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (3) any action arising pursuant to any provision of the Delaware General Corporation Law or our certificate of incorporation or bylaws, or (4) any other action asserting a claim that is governed by the internal affairs doctrine shall be the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware), in all cases subject to the court having jurisdiction over indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in our securities shall be deemed to have notice of and consented to this provision. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law for the specified types of actions and proceedings, the provisions may have the effect of discouraging lawsuits against us or our directors and officers. Our bylaws also provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar’s address is 6201 15th Avenue, Brooklyn, New York 11219.

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

1. Registration Statement on Form S-8 (No. 333-230861) pertaining to the 2018 Equity Incentive Plan and 2018 Employee Stock Purchase Plan of Domo, Inc. and

2. Registration Statement on Form S-8 (No. 333-225978) pertaining to the 2018 Equity Incentive Plan, 2018 Employee Stock Purchase Plan and 2011 Equity Incentive Plan of Domo, Inc.;

of our report dated April 10, 2020, with respect to the consolidated financial statements of Domo, Inc. included in this Annual Report (Form 10-K) of Domo, Inc. for the year ended January 31, 2020.

/s/ Ernst & Young LLP

Salt Lake City, Utah
April 10, 2020

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joshua G. James, certify that:

1. I have reviewed this Annual Report on Form 10-K of Domo, 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: April 10, 2020

/s/ Joshua G. James
Joshua G. James
Founder and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Bruce Felt, certify that:

1. I have reviewed this Annual Report on Form 10-K of Domo, 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(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

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

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

Date: April 10, 2020

/s/ Bruce Felt
Bruce Felt
Chief Financial Officer
(Principal Accounting and Financial Officer)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the filing of the Annual Report on Form 10-K for the fiscal year ended January 31, 2020, as filed with the Securities and Exchange Commission on the date hereof (the "Report") by Domo, Inc. (the "Company"), Joshua James, as the Chief Executive Officer of the Company, and Bruce Felt, as the Chief Financial Officer of the Company, each hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934; and

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

Date: April 10, 2020

/s/ Joshua G. James

Joshua G. James
Founder and Chief Executive Officer (Principal Executive Officer)

/s/ Bruce Felt

Bruce Felt
Chief Financial Officer (Principal Accounting and Financial Officer)

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

This certification accompanies the Report to which it relates, is not deemed filed with the Securities and Exchange Commission and is not to be incorporated by reference into any filing of Domo, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended (whether made before or after the date of the Report), irrespective of any general incorporation language contained in such filing.