



2020

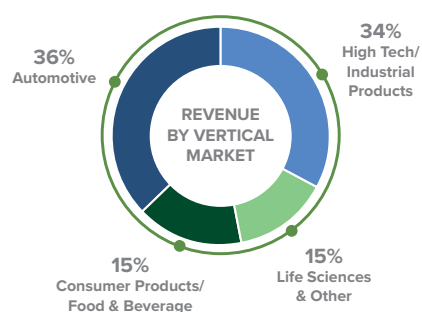
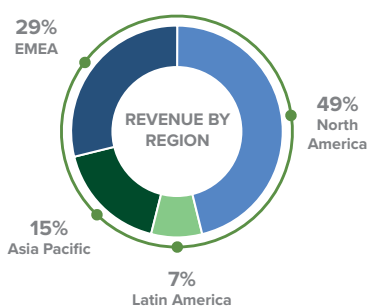
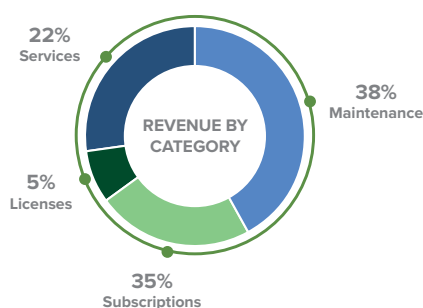
ANNUAL REPORT

FISCAL YEARS ENDED JANUARY 31

Amounts in thousands, except per share data

FINANCIAL HIGHLIGHTS:

| | 2020 | 2019 | 2018 |
|-------------------------------------|-----------|-----------|-----------|
| Total Revenue | \$310,772 | \$333,016 | \$305,018 |
| Net (Loss) Income | (15,949) | 10,428 | (9,065) |
| Diluted Net (Loss) Income Per Share | | | |
| Class A | (0.82) | 0.50 | (0.49) |
| Class B | (0.69) | 0.44 | (0.41) |
| Cash and Equivalents | 136,717 | 139,413 | 147,023 |
| Total Debt | 12,844 | 13,323 | 13,779 |
| Cash Flow From Operations | 16,997 | 19,007 | 10,418 |



ABOUT QAD: QAD provides innovative enterprise software applications for leading global manufacturing companies. QAD applications are designed to simplify the management and enhance the efficiency of manufacturing resources and operations both within and beyond the enterprise, enabling companies throughout the world to collaborate with their customers, suppliers and partners.

DEAR SHAREHOLDERS,

FY20 was an important year for QAD, during which we made significant progress in our goal to become the leading provider of cloud ERP to our focus manufacturing segments.

Sales and Marketing investments really started to show very positive results in FY20. We finished the year closing 99 cloud bookings, with a healthy 50/50 mix of new customers and conversions, underlining the value of our Cloud solution to both existing and new customers. Our bookings growth by value over prior year was over 70%, helping us finish the year with a run rate for subscription revenue above \$120 million. Our efforts on pipeline generation were positive and helped us build a strong funnel going into FY21. We were able to recruit and train a good number of sales reps and strengthened our management team with the addition of a new head of North America and new head of our QAD Precision division.

Our cloud operations team enjoyed another very successful year. We accomplished an improvement to our subscription margin of 1% to 64% for the full year. The margin improvements were driven by automation in our deployment procedures, which allowed for a 30% growth of deployed servers without an increase in headcount, and various other automation transactional processing tasks. We launched the new generation of our Service Delivery Center with full integration across our

enterprise teams and our on-premises and cloud technology teams. Our customer satisfaction surveys revealed a 96% rating due to our focused enterprise teams, account relationships, and increased stability attaining a 99.985% application up-time across our Cloud systems. We completed a total of 120 cloud projects during the year, which included net new customer go-lives, lift-and-shift conversion of on-premises customers to the cloud, upgrades, and additional modules or division (QAD DynaSys and QAD Precision) implementations. With respect to cyber-security, we maintained compliance to various industry standards, and our CSA CSTAR rating improved to Gold, which is the highest level achievable. We successfully completed a number of audits of our systems and procedures, including systems and security audits by one of our banking clients utilizing our GTM&TMS (Global Trade and Transportation Management) solution in the cloud.

For our professional services business, the first half of the year was somewhat challenging as we saw many of our customers moving to the QAD cloud but not pursuing version upgrades to their systems at that time. We took the opportunity during this change in customer behavior to accelerate our transformational plans to expand our professional services partners ecosystem and increase the use of partner-provider services. Additionally, we

rightsized our internal resource pool and were able to achieve the goal of breaking even for the full year by having a profitable second half of the year. We continued to strengthen our partner network, which now provides our customers with access to about four times as much consulting capacity in our network compared to internal resources.

On the product side of the business, we continued to build references in our customer base for our QAD Adaptive Applications, which we formally referred to as our Channel Islands project. We released significant upgrades to our applications suite in the areas of supply chain efficiency and shop floor operations integration. Our Enterprise Platform added capabilities around Type Scripting and Formula processing, allowing our customers to securely create extensions to the QAD solution or new business applications with little or no coding. In addition, we continued adding important capabilities in support of new and changing governmental requirements around the world.

We also completed an important strategic planning effort that resulted in a plan to help us grow our cloud business and improve our profitability and financial metrics. While the timing of the plan has some variability due to the current COVID-19 pandemic, the foundation is set, and we published our aspirational long-term model for the company. In addition, in order to enhance the visibility of our subscription business, we issued a number of additional metrics allowing our shareholders further insight into the business and progress toward our long-term goals.

COVID-19

As we entered FY21, the challenges presented to the global economy by the COVID-19 pandemic are unprecedented and present an increased level of uncertainty as to the depth and length of the economic malaise and the speed and timing of the eventual recovery.

While this crisis is on-going, we are strengthening the relationship with our customers, providing them with continuity of service to their systems in the QAD Cloud and supporting their on-premises implementations. We have been able to seamlessly transition our entire cloud support group to a work from home environment while, at the same time, improving the time to resolution of customer issues. In addition to what we normally do, we helped about 45 of our customers become more agile businesses by upgrading their networks allowing them to work remotely during these times of crisis.

As a business, we have entered this turbulent time with about 75% of our revenues recurring in nature, a very strong balance sheet and cash position. The strength of the model, along with prudent management of our operations during these times, should allow us to continue focusing on advancing our strategic positioning by improving our product offering and enhancing the efficiency and streamlining of our already best-in-class implementation methodologies for our applications.



LOOKING AHEAD

While the crisis created by COVID-19 has created uncertainty around the timing for achieving our strategic goals, we remain confident that our position is solid and that our plans are sound. This crisis also emphasizes the importance for companies to be agile in dealing with rapid and unpredictable change in order to not only survive, but to compete and succeed in today's business environment. This increased need for agility further supports the benefits and value provided by our cloud solutions.

As we emerge out of the current crisis, we believe our unique position - as a vertically focused, global cloud solutions provider to the manufacturing industry end markets

we serve, should enable us to resume our growth, continue to gain market share, provide our customers with the tools they need to be competitive and our shareholders with good returns.

We would like to thank our customers for their continued trust in us, and our employees and partners for enabling us to achieve our goals.

Sincerely,

Anton Chilton, CEO

Pam Lopker, President and Founder

2020

QAD FORM 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington D.C. 20549

FORM 10-K

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

For the fiscal year ended January 31, 2020
OR

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

Commission File Number: 0-22823

QAD Inc.

(Exact name of Registrant as specified in its charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

77-0105228

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

100 Innovation Place

Santa Barbara, California 93108

(Address of principal executive offices and zip code)

Registrant's telephone number, including area code **(805) 566-6000**

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 A Common Stock, \$0.001 par value | QADA | NASDAQ Global Select Market |
| Class B Common Stock, \$0.001 par value | QADB | NASDAQ Global Select Market |

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ YES ☒ NO

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ YES ☒ NO

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

Indicate by checkmark 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, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

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

As of July 31, 2019, the last business day of the Registrant's most recently completed second fiscal quarter, there were 16,545,906 shares of the Registrant's Class A common stock outstanding and 3,263,906 shares of the Registrant's Class B common stock outstanding, and the aggregate market value of such shares held by non-affiliates of the Registrant (based on the closing sale price of such shares on the NASDAQ Global Market on July 31, 2019) was approximately \$449 million. Shares of the Registrant's common stock held by each executive officer and director and by each entity that owns 5% or more of the Registrant's outstanding common stock have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 31, 2020, there were 17,112,899 shares of the Registrant's Class A common stock outstanding and 3,321,002 shares of the Registrant's Class B common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Items 10 through 14 of Part III incorporate information by reference from the Definitive Proxy Statement for the Registrant's Annual Meeting of Stockholders to be held on June 11, 2020.

QAD INC.
FISCAL YEAR 2020 FORM 10-K ANNUAL REPORT
TABLE OF CONTENTS

Page

PART I

| | |
|-----------------------------------------|----|
| ITEM 1. BUSINESS | 1 |
| ITEM 1A. RISK FACTORS | 13 |
| ITEM 1B. UNRESOLVED STAFF COMMENTS..... | 27 |
| ITEM 2. PROPERTIES..... | 27 |
| ITEM 3. LEGAL PROCEEDINGS..... | 27 |
| ITEM 4. MINE SAFETY DISCLOSURES | 27 |

PART II

| | |
|-------------------------------------------------------------------------------------------------------------------------------|----|
| ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES | 28 |
| ITEM 6. SELECTED FINANCIAL DATA..... | 30 |
| ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS | 31 |
| ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK | 50 |
| ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA | 51 |
| ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE | 51 |
| ITEM 9A. CONTROLS AND PROCEDURES | 52 |
| ITEM 9B. OTHER INFORMATION | 53 |

PART III

| | |
|------------------------------------------------------------------------------------------------------------------|----|
| ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE..... | 53 |
| ITEM 11. EXECUTIVE COMPENSATION..... | 54 |
| ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS | 54 |
| ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE..... | 54 |
| ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES..... | 54 |

PART IV

| | |
|--------------------------------------------------------|----|
| ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES | 55 |
| ITEM 16. FORM 10-K SUMMARY | 55 |
| SIGNATURES | 94 |

NOTE REGARDING FORWARD-LOOKING STATEMENTS

In addition to historical information, this Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995. Any statements contained herein that are not statements of historical fact should be construed as forward-looking statements, including statements that are preceded or accompanied by such words as “may,” “believe,” “could,” “anticipate,” “projects,” “estimates,” “will likely result,” “should,” “would,” “might,” “plan,” “expect,” “intend” and words of similar meaning or the negative of these terms or other comparable terminology. Forward-looking statements are based on the Company’s current expectations and assumptions regarding its business, the economy and future conditions. A number of risks and uncertainties could cause actual results to differ materially from those expressed or implied in the forward-looking statements. Factors that might cause such a difference include, but are not limited to, those discussed in Item 1A entitled “Risk Factors” which are incorporated herein by reference, and as may be updated in filings we make from time to time with the Securities and Exchange Commission. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management’s opinions, expectations and projections only as of the date of this Annual Report on Form 10-K and are subject to risks, uncertainties and assumptions about our business. We undertake no obligation to revise or update or publicly release the results of any revision or update to these forward-looking statements except as required by applicable securities laws. Readers should carefully review the risk factors and other information described in this Annual Report on Form 10-K and the other documents we file from time to time with the Securities and Exchange Commission, including the Quarterly Reports on Form 10-Q to be filed by QAD in fiscal year 2021.

PART I

ITEM 1. BUSINESS

QAD is a leader in cloud-based enterprise software solutions for global manufacturing companies. Our solutions, called QAD Adaptive Applications, are designed specifically for automotive suppliers, life sciences, consumer products, food and beverage, high technology and industrial products manufacturers. We offer a full set of core manufacturing enterprise resource planning (ERP) and supply chain planning (SCP) capabilities. Our architecture, called the QAD Enterprise Platform, allows manufacturers to rapidly upgrade existing functionality; and extend or create new applications that are dependable, secure and scalable, providing manufacturers with the flexibility they need to innovate and rapidly adapt to change.

Global manufacturers are facing ever increasing disruption caused by technology driven innovation and changing consumer preferences. In order to survive and thrive, manufacturers must be able to innovate and change business models at unprecedented rates of speed. QAD calls these manufacturing companies Adaptive Manufacturing Enterprises.

QAD’s cloud solutions integrate our software, hardware and services in a cloud-based IT environment that we deploy, support, upgrade and manage for our customers. Our cloud offerings are designed to be rapidly deployable to customers, intuitive for our users, easily upgradable and seamlessly integrate with other applications. QAD cloud solutions are cost-effective, secure, standards-based, reliable, and require lower up-front customer investment.

Over 2,000 manufacturing companies have deployed QAD solutions to run their businesses across approximately 4,000 sites globally. Today, our solutions are used by over 300,000 active users, of which our cloud and subscription users have grown by over 23% to 53,000 from 43,000 in the prior year. We were founded in 1979 and our principal executive offices are located in Santa Barbara, California. Our principal website address is www.qad.com. Our office address is 100 Innovation Place, Santa Barbara, CA 93108. We employ 1,920 full-time employees throughout our direct operations in 24 countries across the North America, Europe, Middle East and Africa (EMEA), Asia Pacific and Latin America regions.

OUR TARGET VERTICAL MARKETS

We focus our efforts on delivering mission-critical software solutions to enterprise customers in six core vertical markets within global manufacturing – automotive, life sciences, consumer products, food and beverage, high technology and industrial products. Within these vertical markets, we focus on 22 sectors where many of our existing customers operate and our solutions are a strong product fit. We offer solutions designed to overcome the business challenges within each sector, based on our in-depth knowledge of the area and best practices. In addition, we participate in industry groups serving our target sectors to ensure that we address regulatory compliance issues, evaluate new manufacturing practices and leverage advanced technologies to give our customers a maximum competitive advantage.

Automotive: Automotive suppliers are a key focus for QAD. Automotive suppliers must meet critical industry standards such as the Materials Management Operations Guideline/Logistics Evaluation (MMOG/LE) and International Automotive Task Force (IATF) 16949:2016 (previously ISO/TS 16949). Disruptions to the supply chain can cause significant financial impact. QAD's automotive-specific processes and built-in industry best practices help automotive suppliers reduce costs, mitigate supply chain risk and improve supply chain planning and visibility. Our customer base includes companies serving the global automotive marketplace and we focus on two sectors: tier 1 suppliers and the automotive aftermarket. We deliver unique capabilities to support the collaboration requirements of automotive suppliers, including the strict quality requirements of Advanced Product Quality Process (APQP) and Production Part Approval Process (PPAP). Many of our customers use QAD Cloud EDI because it provides a scalable solution which standardizes Electronic Data Interchange (EDI) across their global enterprise. QAD Supplier Portal, which allows for electronic communication with other suppliers, is another product commonly used by our automotive customers. QAD solutions are in use at many of the market-leading automotive parts companies throughout the world that manufacture a broad range of components used in interiors, electrical components, safety systems, bodies and drivetrains.

Life Sciences: Life sciences manufacturers are dedicated to innovation, product quality and patient safety; however, a tightening regulatory environment, increasing cost pressures and greater supply chain complexities present challenges to the industry. Emerging markets, quality initiatives, and mergers and acquisitions activity also add to the complexity of life sciences manufacturing and distribution. QAD focuses on the following four sectors in the life sciences industry: diagnostic devices; contract manufacturing; medical devices; and pharmaceutical/biotechnology manufacturers. QAD solutions help global life sciences companies manufacture products in accordance with current Good Manufacturing Practices (cGMP) regulations and standards like ISO13485:2016 that are required by regulators around the world. In addition to cGMP, QAD solutions support many business and regulatory processes specific to the life sciences industry, such as automated quality management, supply chain planning and serialization in support of requirements for Unique Device Identification (UDI), the Drug Quality and Security Act (DQSA) and the Falsified Medicines Directive (FMD). QAD Adaptive ERP for life sciences provides our customers with a qualified IT infrastructure as a key building block to help them ensure that they have a solid foundation for addressing life sciences regulatory requirements.

Consumer Products: Manufacturers of consumer products have the objective of delivering the right product, in the right quantities, to the right location at the right time to satisfy demand. To meet this goal, effective supply chain management is needed to synchronize critical activities and functions across the organization. To gain market share and improve profitability, consumer products companies must anticipate and meet customer demand while managing their margins and complying with evolving safety and environmental regulations. QAD focuses on the following four sectors in the consumer products industry: household and personal packaged products; consumer electronics; assembled and discrete products; and jewelry manufacturing. The manufacturing processes for these items vary and depend on the nature of the item; however, the fulfillment and distribution requirements have significant commonality. Major retailers manage complex supply chains and are typically very demanding of their suppliers as they strive to service growing demand from consumers for speed of delivery and variety of products. QAD solutions address the complex replenishment requirements of companies supplying the retail supply chain, including promotional pricing, demand planning, quality compliance and product configuration.

Food and Beverage: Food and beverage manufacturing is complex and requires regular updates to product, packaging and pricing. There is a lack of uniformity in the supply chain, which challenges food and beverage manufacturers to excel at supply chain management, as seasonal demand changes cause inefficiencies and increase manufacturing costs. At the same time, manufacturers must comply with requirements like field to fork traceability and record keeping. QAD focuses on the following five sectors in the food and beverage industry: fresh foods; frozen foods; candy and confections; bottling and canning; and spirits, wine and beer. Our solutions support regulatory and quality initiatives, such as the U.S. Food Safety Modernization Act (FSMA) and Hazard Analysis and Critical Control Point (HACCP) analysis, which address the management of biological, chemical and physical hazards. Our solutions support the product cycle of the food and beverage industry from raw material production, procurement and handling to manufacturing, distribution and consumption of the finished product.

High Technology: The success of manufacturers in the high technology industry relies on innovation and the ability to manage change. These manufacturers are subject to constant pressure on margins, challenges with cross border shipments, strains on material availability and cost control initiatives. They require agile and effective global supply chains. All of these challenges need to be met while complying with standards and industry regulations. QAD solutions are used by many high technology companies that manufacture a diverse range of products. QAD focuses on the following three sectors in the high technology industry: standalone devices and test equipment; batteries, power supplies and lighting; and cable, wiring and connectors. High technology companies often face the challenges of very complex product structures with a need for traceability of parts and processes throughout their entire supply chain, as well as tight control of engineering changes. Many high technology companies providing complex systems also face the challenge of managing installation and support of

equipment after sale, in addition to managing field engineering resources. A high technology manufacturer can use QAD's solutions to configure product based on customers' preference; manufacture and assemble product according to a customized specification; and schedule, install and support equipment throughout its lifecycle.

Industrial Products: Today's global customers are demanding more configure-to-order, make-to-order, and assemble-to-order products. As a result, the modern, agile industrial manufacturer must be responsive to demands while managing tight margins, operational challenges and rapid changes to product features. QAD customers manufacture products as diverse as machine tools; specialist ceramic materials used in aerospace and defense; and equipment used in the oil and gas industries. Fluctuating demand leads to significant challenges in managing the internal supply chain, coordinating the extended vendor ecosystem, controlling costs, ensuring quality, tracking production, and optimizing inventory levels. Companies in this broad vertical market have requirements to maintain many manufacturing methodologies, often within the same enterprise. QAD focuses on the following four sectors in the industrial products industry: flexible packaging; engineered materials; standalone equipment; and roll stock and wire cable. Our solutions support multiple manufacturing methodologies in parallel, including lean manufacturing. The need for traceability of materials from source through to the finished product is often important to our customers, and QAD's capabilities in traceability and serialization support this feature.

Our focus on these vertical markets gives us a competitive advantage by providing a solution developed specifically for our target customers, without the complexity and distraction of functionality they don't want and don't need. While some vendors provide broader solutions built for many industries, our targeted vertical focus allows our customers to implement our solutions with fewer configurations and customizations than our competitors require, enabling less complex and faster implementations, along with easier upgrades. We leverage our vertical market expertise in research and development, to meet specific industry needs; in sales, to understand our customer's unique requirements; in presales, to demonstrate how these requirements are handled in the software; and in services, to apply best practices in the optimization of business processes and the implementation of the software. Our options to sell our product in the cloud or as on-premises licenses enable customers operating in multiple locations to choose a deployment option that best meets their unique needs.

QAD SOLUTIONS

QAD's software solution suite is called QAD Adaptive Applications with QAD Adaptive ERP the core solution in the suite. QAD Adaptive ERP enables manufacturers to maximize the return on their ERP investment by achieving greater levels of fit today and rapidly responding to change tomorrow. It is built with industry best practices for global manufacturers based on QAD's deep industry-specific expertise. The software runs on the QAD Enterprise Platform using QAD's Adaptive User Experience (UX). QAD Adaptive Applications is QAD's portfolio of flexible solutions for global manufacturers. Though QAD Adaptive ERP is the core application in the portfolio, ERP is just one of the products that a manufacturer may require. Whether a manufacturer needs supplier relationship management, eInvoicing, EDI, trade management, supply chain planning, demand planning, transportation execution, asset management, customer self-service, quality management, data collection/label printing, IoT, cloud integration or analytics, QAD Adaptive Applications offers a proven set of solutions, all fully integrated with QAD Adaptive ERP.

The QAD Enterprise Platform helps manufacturers incorporate unique functionality without creating long-term rigidity in the system. Eliminating rigidity means that future enhancements and upgrades are easier and less costly to deploy. Additionally, functionality created on QAD's Enterprise Platform can move through future upgrades without re-creation. This provides greater agility over the long term and increases the value of enhancements through greater longevity. The QAD Enterprise Platform consists of two foundational components:

- Foundation Services provides platform services for common use during application development, platform management tools to support the development lifecycle and infrastructure management capabilities to address configuration and deployment.
- Platform Services includes User Interface, Mobile, Security, Integration, API Management, Analytics, Data Query, Browse, Globalization, Collaboration and Event/Task Scheduling. These best-in-class services streamline development of apps by providing common frameworks for reuse.

QAD's Adaptive UX provides manufacturers an adaptable and device-independent user experience that supports personalization for each role, activity and user. Users of QAD Adaptive ERP and other QAD Cloud apps use the Adaptive UX to simplify and speed-up task completion and to give decision-makers access to analytics-based insight to make smart decisions and track and prevent exceptions. The Adaptive UX also includes select native mobile applications for QAD Adaptive ERP and the flexibility to meet new user interface requirements as they emerge. Users can easily personalize their experience, in terms of menus, fields and other UX attributes.

QAD Cloud

QAD Adaptive Applications are deployed via the reliable and proven QAD Cloud that offers 24x7, follow-the-sun, around-the-world support. QAD works with customers to achieve fast, dependable implementations and offers related professional services to help ensure business outcomes are properly defined and measured; and staff is fully trained.

QAD Cloud allows customers to rapidly deploy, scale and extend their solutions in a highly-available, highly-secure environment. QAD manages the end-to-end process of the deployment of the enterprise system, including the provisioning of the customer's environments, performing continuous system performance tuning and monitoring to avoid disruptions, ensuring backup and disaster recovery processes are in place, applying software upgrades and patches, and ensuring industry best practice security processes are deployed. Customer's internal organizations can then focus on strategic initiatives while relying on QAD to provide their users with highly-secured and highly-reliable systems that support their ability to navigate through complexity and increasing disruption in their markets.

QAD Adaptive Applications are comprised of the following software solutions:

Customer and Service Management

QAD's customer and service management solutions enable global manufacturing companies to acquire new customers efficiently, grow revenue through multiple channels and retain customers through superior service and support. Customer and service management helps our customers measure marketing campaign effectiveness, manage the sales opportunity lifecycle and optimize order and fulfillment processes. QAD's Configurator has the ability to create unique products specified to customer requirements, enabling simple and cost-effective controls for mass customization of products. The suite includes the ability to centralize sales order entry, including orders for configured items, and to ship the items from any facility or business entity. Customer Self Service provides a web storefront for our customers to transact sales, which is fully and securely integrated with the rest of QAD Adaptive Applications.

Manufacturing

QAD's manufacturing solutions deliver comprehensive capabilities to support manufacturing business processes, from planning through execution, and provide visibility and control of materials and labor. The suite has capabilities in the areas of planning and scheduling, data collection, label printing, cost management, material control, shop floor control, quality management and reporting in various mixed-mode manufacturing environments. The manufacturing models supported include Discrete, Repetitive, Kanban (particularly relevant in lean manufacturing practices), Flow, Batch/Formula, Process, Co-products/By-products and Configured Products. The system also includes flexible item attributes that customers can use to track lot characteristics or test results. The Lot Trace Workbench provides insight into any products' component genealogy and greatly simplifies product recalls. QAD's manufacturing solutions support companies' deployment of business processes consistent with their industry's best practices. The integration between scheduling, planning, execution, quality and materials allows tight control and simple management of processes.

Enterprise Asset Management (EAM) helps companies manage maintenance and installation of capital equipment. The solution supports both planned and unplanned equipment maintenance based on elapsed time or completed quantities. It includes the ability to track calibrations, labor and required parts used for maintenance. In addition, it has project accounting capabilities to plan, track and control detailed project budget and spending data for capital expense projects such as refits or building and commissioning new plants.

QAD provides enterprise quality management and regulatory compliance solutions as part of our manufacturing solution. The capabilities support customers' compliance with industry-specific quality standards. In the automotive vertical, QAD delivers automation of Advanced Product Quality Planning (APQP) methodologies, including Production Part Approval Process (PPAP), process flow and approvals. In the life sciences vertical, customers benefit from critical functionality supporting corrective and preventative action and non-conformance reporting. General manufacturing quality solutions are provided for audit, risk management, document control, gauge calibration, inspection and statistical process control.

Supply Chain Execution

QAD's supply chain capabilities provide the tools required to make requisitions and procure and purchase materials and parts needed for manufacturing. Purchasing readily integrates with inventory and warehouse management capabilities. Additionally, QAD's supply chain solution manages consignment inventory for consignors and consignees, and distribution requirements planning to optimize and balance inventories at multiple distribution centers, enabling fast and cost-effective

demand fulfillment. QAD Supplier Portal provides a cloud-based, subscription supply chain insight and performance management solution that provides digital collaboration between suppliers and buyers to help optimize supply chains operations.

Financials

QAD's financials solution provides comprehensive capabilities to manage and control finance and accounting processes at a local, regional and global level. The software supports multi-company, multi-currency, multi-language and multi-tax jurisdictions, as well as consolidated reporting and budgeting controls. These capabilities give cross-functional stakeholders access to financial results; enabling faster, more informed decision making while providing robust internal controls. Enterprise Financials includes multi-GAAP support, such as International Financial Reporting Standards (IFRS), as well as extensive local tax, reporting and segregation of duties controls.

QAD DynaSys Demand and Supply Chain Planning

Our division QAD DynaSys develops, markets and supports our Demand and Supply Chain Planning (DSCP) solution. The QAD DynaSys DSCP technology is a comprehensive end-to-end digital supply chain planning solution that holistically optimizes all material and data flows across the supply chain. This supports global manufacturers to manage all procurement, manufacturing, inventory, distribution, and sales activities in a single in-memory data model ("DynaSys Single Click Collaborative" platform) that provides rapid business simulation.

QAD DynaSys customers use DSCP to improve and protect market share by synchronizing demand & supply plans ensuring optimal product availability. This improves revenue by minimizing lost sales and reducing working capital by eliminating slow & obsolete inventory. QAD DynaSys customers benefit from increased supply chain visibility and a rapid response to unforeseen events that enables supply chain resiliency.

QAD DynaSys uses artificial intelligence to perform a range of digital planning operations including automated data cleansing, intelligent demand clustering, and forecasting products with complex sales behavior. Combining machine learning with advanced analytics and real-time data connectivity in a single collaborative cloud-based solution with a digital user-experience provides strong market differentiation.

QAD DynaSys DSCP solutions are used by organizations across many industries including food and beverage, life sciences, consumer products, automotive, industrial, distribution & wholesale and are sold to our existing customers and to the general market through our DynaSys division.

QAD Precision Global Trade and Transportation Management

QAD develops and markets global trade and transportation solutions directly to our existing customers and to the general market through our Precision division. QAD Precision Global Trade and Transportation Management (GTM&TMS) provides automated rating, routing, auditing and complete management of multi-modal shipping. It also automates the generation and filing of complex customs documentation, qualifies products for potential duty programs, and includes license management and restricted party screening to mitigate the risk of trade regulation violations. The solution allows companies to manage and optimize a network of carriers for shipments including parcel, less than truckload, full truckload and container shipments whether using land, sea or air carriers.

Analytics

QAD's embedded analytics and business intelligence provide decision makers and company stakeholders with key data to measure performance against company and strategic goals. QAD's analytics solution helps customers perform complex analyses, make informed decisions and improve performance management by highlighting areas that need improvement and enabling drill down to source data. The analytics suite consists of multiple analysis and data extraction tools all working in harmony to provide user-defined analysis such as consolidated reporting or reporting by geography, product line or cost center.

The solution consists of Reporting Framework, which provides powerful, yet simple, reporting and real-time visibility with ad hoc inquiries; Operational Metrics, which enables companies to define and monitor key performance indicators; and Business Intelligence, which allows for dynamic analysis and trend reporting across multiple data sources. Customers can also access Business Intelligence using mobile devices, which allows users to view, filter and sort all data accessible to browses using mobile devices.

Action Centers are designed to provide data and information users need in order to work efficiently in a straightforward visual format. Users can drill down into more detail or take quick action based on the insight the solution provides. Action Centers provide built-in analytics and operational metrics as well as more than 400 browses and nearly 450 reports. All information can be accessed from a mobile device to support users who are not at their desk or in the office.

Integration

QAD Adaptive Application uses a service-oriented architecture, allowing customers to integrate with non-QAD business applications. Through the Q-Xtend integration toolset, QAD supports application interoperability using open standards, comprehensive APIs and event management. QAD Boomi AtomSphere, based on Dell Boomi, provides an integration platform for cloud and on-premises application, data and process integration. QAD Cloud EDI provides “as a service” EDI translation and communication services, ensuring manufacturers have a scalable solution that can be implemented rapidly and that standardizes EDI across the enterprise. QAD EDI eCommerce offers a complete on-premises EDI solution that simplifies electronic data interchange with trading partners across the value chain. Cloud-based QAD eInvoicing supports the exchange of digital invoices between supplier and customer, providing for paperless invoicing in 54 countries and helping manufacturers meet growing digital tax compliance requirements.

Internationalization

QAD supports companies that manufacture and distribute their products around the world. When a global company expands its operations, it often needs to accommodate local languages, local accounting standards and local business practices. Operating in different countries also requires access to specific local software, such as that used to interface to banks in their country of operation. QAD supports the requirements of over 60 different countries with its internationalization capabilities.

Customer Support and Product Updates

Customer support services and product enhancements are provided to our cloud customers as part of their monthly subscription fee and to on-premises customers via our maintenance offering. Customer support services include Internet and telephone access to technical support personnel located in our global support centers. Through our support services, we provide the resources, tools and expertise needed to maximize the use of QAD Adaptive Applications. Our cloud customers and on-premises customers who are current on maintenance are also entitled to receive product upgrades and enhancements on a when-and-if available basis.

Our online support site provides access to an extensive knowledge database, online training materials, a virtual training environment, remote diagnostics and our software download center, called QAD Store. Our support professionals in our global support centers focus on quickly resolving customers’ issues, maintaining optimal system performance and providing uninterrupted service for complete customer satisfaction.

Our cloud environment is managed by QAD with infrastructure operated by us, but located within third-party data center facilities or from cloud computing platform providers. QAD monitors security and maintains the operational infrastructure of the customer environments located within the third party cloud computing platform providers. QAD resources, located primarily in the U.S. and India, manage the day-to-day operations of our cloud computing solutions and act as the control point for all activities including monitoring system performance, application management, service level management, disaster recovery, technical upgrades and customer engagement. Each of these managed processes are based on Information Technology Infrastructure Library (ITIL) standards and governed by ISO compliance.

QAD Global Services

QAD offers professional services including consulting, deployment, training, technical, development and integration to facilitate adoption of our Adaptive Applications solution and enable customer success.

QAD Global Services comprises approximately 350 consultants located throughout the world, augmented by a growing global network of certified partners. Our consulting ecosystem spans 60 countries. QAD consultants and partners are trained on our best practice implementation methodologies and have obtained certifications of proficiency in many areas. We offer a complete portfolio of services, delivered to consistent standards across the globe. Working in tandem with our partners, we support national and global projects on behalf of QAD customers.

QAD Global Services engages with our customers across the entire enterprise application life cycle through planning, design, implementation and post go-live support. Whether in the cloud or on-premises, our Global Services group assists our customers with initial deployments, upgrades to more current product versions, migration of on-premises deployments to the cloud, conversion and transfer of historical data, ongoing system and process optimization, and user training and education. In addition, through our ecosystem of certified partners, QAD can offer our customers these activities at scale. We also offer augmented resources through our ecosystem to assist with typical site-based implementation activities such as data cleansing, functional support, training and user acceptance testing.

In support of QAD's vision of all customers becoming Adaptive Manufacturing Enterprises, QAD has developed a framework of Key Performance Indicators (KPIs) used by QAD Global Services to measure pre- and post-implementation performance of business processes and aid in the diagnosis of opportunities for continuous improvement. The QAD KPI framework is available to all customers and is monitored using the QAD analytics suite.

QAD's principal methodology for deployment of solutions is called QAD Easy On Boarding (EOB). EOB has been designed to make deployment of QAD solutions on-premises or in the cloud standardized and efficient. EOB features predefined industry process models and work instructions built into the products themselves as well as implementation guides and scripts, all based on our experience with best practice standards, resulting in greater out of the box fit. With EOB, implementation can be faster than more traditional approaches.

QAD Global Services focuses on assisting customers with the following activities:

Implementations – QAD Global Services supports customers with the initial implementation of QAD Adaptive Applications. QAD Global Services has expertise in global implementations, harnessing the entire QAD Global Services ecosystem to provide local or remote support to meet customer requirements. QAD Global Services deploys our applications both on-premises and in the cloud. In addition, QAD Global Services has the experience to assist new customers with migration from other enterprise application systems. This service includes data conversions as well as process design change management.

Upgrades – QAD Global Services assists customers in the process of upgrading their QAD Adaptive Applications to the latest version, accelerating time to benefit, increasing new functionality and applying usability best practices.

Conversions – QAD Global Services employs a standardized process for converting from on-premises solutions to the cloud.

Integration – QAD Global Services has the expertise and experience to quickly integrate QAD solutions with other systems.

Systems Management – QAD Global Services delivers a range of services to support the technical management of systems and performance monitoring for those customers who choose on-premises deployment.

Training and Education – QAD Global Services offers a full range of services leveraging QAD's learning management system. Users can access multimedia training on all QAD offerings and take advantage of pre-defined learning plans for all of the roles that QAD users typically perform. Global Services also provides customized courses that are taught on-site to meet specific customer needs and are available to end users, IT professionals, department managers, partners and consultants.

Extended Solution Support – QAD Global Services is available to support interfaces, Automation Solutions, any customer specific requests to tailor applications and EDI solutions through our Extended Solution Support Services.

Quality Assurance – QAD Global Services offers Quality Assurance services to review our customers' independent or third-party managed upgrades and implementations.

QAD Global Services' network of employees, consultants and partners knows QAD software best. They diagnose issues preventing businesses from running efficiently and prescribe steps to maximize the benefits of QAD Adaptive ERP. These QAD experts offer what outside consultants cannot - a deep understanding of the industries in which our customers operate and proven experience helping customers leverage our software to become Adaptive Manufacturing Enterprises. QAD Global Services and its certified ecosystem of partners offer a full range of program management, project management, industry consulting and technical services certified in our products and methodologies.

OUR GROWTH STRATEGY

QAD believes there are substantial growth opportunities in its cloud business. Global manufacturers are facing unprecedented levels of disruption and turbulence. Responding to these changes requires a level of agility that legacy ERP solutions fail to deliver. QAD's Adaptive ERP offers greater fit out of the box, unparalleled speed of deployment, and the ongoing ability to easily adapt and extend systems to meet the challenge of accelerating change. As a market leading solution for agile ERP, we expect to see a growing number of manufacturers moving from their legacy providers and turning to QAD to help them thrive in the digital manufacturing era. Additionally, we also expect to see continued conversions of our on-premises customers to the cloud.

We invest for future growth by focusing on the following key priorities:

Dominate disrupted markets for new cloud customer acquisitions. The accelerating pace of change in our customers' markets has created a disconnect between their business requirements and what their systems are able to support. Legacy ERP systems were not designed to support today's rapid pace of change. The QAD Enterprise Platform was designed to provide greater fit and flexibility to easily meet tomorrow's requirements. As such, disruption in our customers' markets becomes a compelling reason for changing their ERP systems and one that we are well positioned to address. We are targeting sectors within our primary verticals with the greatest disruption and actively pursuing new customers where we can provide the best fit. We are investing in sales and marketing to increase new customer acquisitions.

Grow our cloud business and expand our footprint within existing customers. We believe there is substantial opportunity to grow our cloud-based enterprise solutions within our global manufacturing customer base. Our cloud solutions allow our customers to focus on their products and services without the distraction of administering their enterprise applications or maintaining their infrastructure. With over 300,000 active users of our on-premises and cloud solutions, of which 53,000 are cloud users, we have many opportunities to increase cloud revenue across our existing installed base by converting our on-premises customers to our cloud-based solution, selling additional modules and users to our existing cloud customers, extending our existing offerings and reducing customer attrition by delivering an excellent customer experience.

Continuous product development and rapid response to change. Manufacturers are facing a swiftly changing business environment fueled by exponential growth in underlying Industry 4.0 technologies such as Internet of Things (IoT), Machine Learning (ML), Artificial Intelligence (AI), Additive Manufacturing (3D Printing), Blockchain, Augmented Reality, and Predictive Analytics. We believe delivering a focused, flexible ERP system will be increasingly attractive to pragmatic manufacturers seeking a long-term fit of their business systems in support of their strategy in changing markets. We are committed to continuous investment in product development, our platform and advanced technologies to ensure our products have the necessary capabilities to meet the needs of our global customers and enhance our competitive position in the vertical markets we serve.

Focus on global manufacturing and leverage expertise within key vertical markets. Many manufacturers operate globally, requiring a provider that can tailor solutions to the unique needs of their markets, deliver local and global services resources and support local languages. Solutions must be cost effective and easy to implement and use. Our solutions offer many benefits to customers with global operations, including capabilities that support operations in multiple geographies with a variety of languages and currencies, as well as compliance with complex local regulations and business practices. Our existing global footprint is a key leverage point for meeting these needs by utilizing offices, personnel and partnerships in many countries around the world. We also employ people with specific knowledge and experience in the industries in which our customers operate. We provide our solutions to 22 sectors across six vertical manufacturing markets; and we actively participate in several leading industry associations. Our industry knowledge continues to deepen through regular interaction with our customers. This collective experience allows QAD to develop solutions with specific capabilities that address our customers' needs in the industries they serve.

Expand our global partner ecosystem. We currently sell a majority of our software solutions and services directly. We also sell our software solutions and services indirectly via sales agents, distributors and services partners. We are focused on expanding our indirect sales channels to accelerate our reach into new markets and drive new customer growth. We are focused on expanding our services partner network to strengthen our ability to support our customers globally and to have the ability to quickly expand or contract as demand for services fluctuates.

TECHNOLOGY

QAD Adaptive Applications are designed to achieve our vision for global manufacturing companies to effectively run their business in a rapid, agile and effective manner. This is achieved by providing an agile platform to meet new and developing requirements by combining advanced digital technologies and proven industry best practices that emerge from business disruptors. We have chosen the best technologies to achieve our vision, focusing on user experience, integration, business services, analytics, databases and deployment flexibility. We embrace ‘openness’ as a core principle of our designs, aiming to allow customers freedom of choice of devices and open connectivity with other systems. The core of QAD’s Adaptive Applications is built upon a service based architecture, which allows application components to communicate with one another through industry-standard messaging techniques such as Representation State Transfer (REST) services. This allows customers to exploit the full benefit of QAD’s open architecture for their businesses.

QAD Adaptive Applications core systems are built upon the QAD Enterprise Platform. The QAD Enterprise Platform is a micro-services architecture with the technologies and development tools needed to build a world class user experience (UX) with comprehensive functionality for global manufacturing companies. This functionality is encapsulated into Apps that can be upgraded independently of each other as well as extended by customers. Apps can be accessed securely over the Internet via a web browser or mobile devices (iOS and Android). The platform provides many advanced services to Apps including an App builder, security, integration, cloud support, analytics, mobile, collaboration and a world-class UX. The platform supports UX, code, data and cloud flexibility to adapt readily to the ever-changing world of technology. The UX is built using the latest open web technologies to support a rich HTML5 user interface. Business logic can be implemented in JavaScript via the more structured Type Script, Oracle’s Java or Progress Software Corporation’s OpenEdge language. Databases include MySQL, Progress OpenEdge and Cassandra data lake.

QAD’s adaptive architecture provides significant flexibility for global companies in deploying QAD Adaptive Applications. Our adaptive architecture allows companies to separate the legal structure of their business from physical operating locations or to separate both of these from the software instances and computer hardware that support them. With QAD adaptive architecture, customers can choose which sites are a part of which companies, which sites are supported on any instance of the application, or which sites operate as one instance. Customers can also choose centralized, decentralized or hybrid computing architectures with parts of their enterprise running from both central resources and local resources.

QAD combines our technologies to provide a comprehensive cloud solution for our customers. Our cloud architecture encompasses infrastructure provisioning and application deployment, management, monitoring and security; providing a world-class development operations practice built around ITIL standards. QAD’s cloud infrastructure operates on a platform that enables QAD to seamlessly deploy customer systems to one of a number of global cloud infrastructure providers as part of the QAD Cloud offering. Our cloud delivery centers are certified under the ISO 9001:2015 standard for quality management, the ISO 20000:2018 standard for service management (SMS), the ISO 27001:2013 standard for information security management (ISMS), the FDA 21 CFR Part 11 requirements for electronic records and signatures, and the SSAE 18 (SOC I-Type II) requirements for reporting and compliance controls.

Cloud deployments for QAD Adaptive ERP are designed to be delivered as single tenant deployments. This decision was made based on our customers’ requirements for a mission critical system that they control. Providing customers with control over when to apply patches and upgrades reduces downtime and aligns to their business cycles. It also reduces the substantial costs associated with validation requirements in Life Sciences.

QAD takes a pragmatic approach to technology that is use case focused. We engage with our customers through experimentation in the QAD Labs. QAD Labs is a combination of people, technology and passion for addressing the challenges of manufacturing planning and operations. The guiding force behind QAD Labs is the collaboration between QAD and our customers. This collaboration involves experimenting with advanced technologies and new processes to address legacy or emerging challenges as well as industry disruption. The experimentation is not hindered by the large budgeting cycles of major projects. By design, the QAD Labs approach allows for rapid application, rapid evaluation and strategic pivots to build on success or investigate alternatives.

This experimentation can be aligned with typical Digital Transformation activities and associated technologies such as IoT, Machine Learning, Robotic Process Automation and Data Lakes. Alternatively, the initiative can be associated with innovation to solve long-term problems with the explosion of emerging new technologies. The pilot projects include integrated shop floor connectivity, traceability and robotic process automation.

PRODUCT DEVELOPMENT

We continued to see our customers' businesses evolve during fiscal 2020 as they work through the geopolitical uncertainty facing global manufacturing. With continued pressure on supply chains caused by disruptive import tariffs, our customers have had to adapt their business models to deal with supply shortages and increased costs. We maintain a global research and development (R&D) organization that provides new product functionality to the market on a semiannual basis, which enables us to respond to industry disruptions and regulatory changes.

The transition from selling on-premises licenses to selling cloud solutions has continued within the enterprise software industry. With cloud solutions, customers are expecting that their software is kept up to date as part of the offering and that security is continuously being verified and updated to guard against security breaches. In fiscal 2020, we released a major upgrade to our software suite that delivered supply chain efficiencies, deeper integration into shop floor operations and deeper reporting of manufacturing activities. Our latest agile manufacturing module and production planning and scheduling functions are now integrated deeply into the shop floor execution and reporting processes.

During fiscal 2020, we introduced our latest release of QAD Adaptive Applications and its core ERP solution, which runs on the QAD Enterprise Platform using the Adaptive User Experience (UX). This latest release further enhances our customers' ability to intelligently adopt and boost adaptive manufacturing capabilities. Adaptive Manufacturing Enterprises can effectively address the increasing pace of change and disruption companies face today. QAD's R&D team has taken great pride in delivering new capabilities that allow manufacturers to better address tomorrow's challenges and rapidly respond to disruption in the marketplace. The Adaptive User Experience has also been implemented in the QAD Supplier Portal, QAD Dynasys Demand Supply Chain Planning and QAD Precision Global Trade & Transportation Execution solutions. The QAD Enterprise Platform has added capabilities that allow users and developers to securely create extensions or applications with little or no coding. We have improved the developer life cycle when creating new applications with added capabilities around type scripting and formula processing. Additionally, we have improved error handling to better address data retrieval issues, enhance data access and usage of the built in REST API's.

We dedicate considerable technical and financial resources to R&D to continually enhance and expand our product suite, including through our internationalization program focused on legal compliance for our global customers operating across borders. As we ended fiscal 2020, we were supporting our customers in 68 countries with a single software solution. We continue to see a global trend toward electronic invoicing and registration of shipments and invoices with government agencies to prevent falsification and tax evasion. Spain, Mexico and Italy all introduced legislation that required all invoices to be registered with the government. All of our customers in these countries installed our Electronic Invoicing solution in fiscal 2020 in order to meet the new government regulations. We also see a continued tightening of tax legislation around the world. India introduced a new Value Added Tax (VAT) process that required all companies to file VAT during fiscal 2020. In fiscal 2020, the Indian government added electronic invoicing in their requirements. We continue to support our customers through these changes without interruption to their businesses. We see government regulations changing continuously across the globe. Our goal is to continue to provide our customers with software that assists them in meeting the legal requirements of the countries in which they do business.

Our R&D organization is comprised of 455 employees located in offices in the United States, India, China, Ireland, Australia, France, Belgium, Spain, Brazil, Great Britain, Indonesia and Poland. Our R&D expenses totaled \$54.7 million, \$54.0 million and \$47.7 million in fiscal years 2020, 2019 and 2018, respectively. Our software is primarily developed internally; however, we also use independent firms and contractors to perform some of our product development activities when we require additional resources or specific skills or knowledge. All outside development is managed by our internal R&D organization. As needed, we acquire products or technology developed by others by purchasing or licensing products and technology from third parties. We continually review these investments in an effort to ensure that we are generating sufficient revenue or gaining enough competitive advantage to justify their costs. We routinely translate our product suite into fourteen languages and through our internationalization program we support mandatory governmental regulations and reporting requirements for 68 countries. This is accomplished through a single offering for our customers in the cloud or on-premises, allowing them to run their businesses using a consistent core business model with the deployment model of their choice. Our development focus is on cloud deployments first. Hence, some functionality that is available to our cloud customers may not be available to our on-premises customers or may have an additional fee associated with it.

We plan to continue to manage significant product development operations globally over the next several years. We believe that our ability to conduct research and development at various locations throughout the world allows us to optimize product development at lower costs and integrate local market knowledge into our development activities. We continually assess the significant costs and challenges, including intellectual property protection, against the benefits of our international development activities.

DIRECT AND INDIRECT SALES

QAD sells its products and services through direct and indirect sales channels located throughout the regions of North America, Latin America, EMEA and Asia Pacific. Each region leverages global standards and systems to enhance consistency when interacting with global customers. Additionally, we have a global account team, and strategic business teams focused on sectors facing the greatest level of disruption where we can provide the greatest product fit.

Our direct sales organization includes approximately 65 commissioned sales people. Supporting our commissioned sales people are vertical experts, business development representatives, business consultants, pre-sales employees responsible for leading demonstrations of our software solutions and customer service representatives supporting our existing customers. Incentive pay is a significant portion of the total compensation package for our sales staff. We continually align our sales organization and business strategies with market conditions to maintain an effective sales process. We cultivate the industries we serve within each territory through marketing, local product development and sales training.

Our indirect sales channel consists of approximately 50 distributors and sales agents worldwide. We do not grant exclusive rights to any of our distributors or sales agents. Our distributors and sales agents primarily sell independently to companies within their geographic territory but may also work in conjunction with our direct sales organization. We also identify global sales opportunities through our relationships with implementation service providers, hardware vendors and other third parties.

MARKETING

Our marketing strategy is to differentiate our offering by focusing on our role in enabling manufacturers to overcome the greatest challenges they face (change and uncertainty) and to support them in achieving the vision of the Adaptive Manufacturing Enterprise. We do this by highlighting QAD's Next Generation Adaptive ERP and its five rapid response technologies that deliver greater fit for today and the flexibility to meet tomorrow's business requirements.

We are targeting sectors within our primary verticals with the greatest disruption and where we can provide the best fit; those companies with the greatest need whom we can help the most.

Our main marketing objectives are to leverage the measurable success in business outcomes our customers have achieved and highlight hidden costs prospects may face with legacy ERP to increase awareness and drive leads in these target sectors. We do this by openly and consistently communicating with QAD customers, prospects, partners, investors and other key audiences. Our primary marketing activities include:

- Account based marketing (ABM) for targeting, assessing buying intent, and display advertising;
- Press and industry analyst relations to garner third-party validation and generate positive coverage for our company offerings and value proposition;
- User conferences and events, such as Explore, as well as participation in other industry events, to create customer and prospect awareness;
- Content marketing and engagement on social channels like Facebook, Twitter, LinkedIn and YouTube;
- Search engine optimization;
- Web site development to engage and educate prospects and generate interest through a deep understanding of the challenges manufactures face and how our solutions can help to overcome them;
- Case studies, white papers, and marketing collateral;
- Customer testimonials, references, and referrals; and
- Sales tools and field marketing events to enable our sales organization to more effectively convert leads into customers.

We recognize the changing buying dynamics and are focused on engaging with prospects early in the sales cycle in order to help set the buying criteria and specifications in a way that uniquely leads to QAD. We seek to accelerate prospects through the buying journey by demonstrating the value of our products, answering questions, and removing roadblocks.

Corporate Marketing supports our regional and strategic business marketing teams, working closely with their respective business development and sales teams.

COMPETITION

Our business is affected by strong competition from both enterprise software application vendors and cloud computing application services providers. The markets for our offerings are rapidly evolving, highly competitive and are subject to changing technology, shifting customer needs and frequent introductions of new applications. Our customers demand greater performance and reliability with lower complexity. Fit, cost, speed, and flexibility are primary criteria in our customers' decision-making processes.

We compete with large, well-established enterprise application vendors, such as SAP, Oracle and Infor, among others, who hold significant market share in the traditional ERP marketplace. These companies have considerable financial resources and name recognition; and have established broad market solutions by developing applications targeted at many industries, not just manufacturing. Internationally, we face competition from local companies, as well as the large enterprise application competitors, many of which have products tailored for those local markets.

Most enterprise application vendors today have some focus on cloud solutions, in addition to on-premises sales, which creates an environment in which we face competition from a variety of vendors that address one or more of our applications. As a result, our cloud solutions compete with both large enterprise software vendors and cloud computing application service providers. In addition, other vendors that provide services in different markets may develop solutions in our target markets and some potential customers may elect to develop their own internal solutions.

We believe the key competitive factors in our markets are:

- Solution fit, breadth and functionality
- Flexibility, integration, security and scalability
- Customer satisfaction
- Speed and ease of deployment and use of applications
- Minimal customizations needed
- Total cost of ownership
- Performance and reliability
- Speed and ease of time version upgrades
- Technological innovation and ability to respond to customer needs rapidly
- Financial resources and
- Reputation of the vendor

We believe that we compete favorably on the basis of these factors. Our Adaptive ERP and Enterprise Platform architecture facilitate rapid deployment, ease of upgrades and eliminate the need for majority significant amount of customizations. To further our market success, we must continue to respond promptly and effectively to technological change and competitors' innovations. Our ability to remain competitive will depend on our efforts in the areas of product development and sales, services and support operations.

EMPLOYEES

As of January 31, 2020, we had approximately 1,920 full-time employees, including 845 in support, subscription and professional services, 445 in research and development, 360 in sales and marketing and 270 in administration. Generally, our employees are not represented by collective bargaining agreements. However, certain employees in our Netherlands, France and Italy subsidiaries are represented by statutory works councils as required under local law. Employees of our Brazilian subsidiary are represented by a collective bargaining agreement with the Data Processing Union.

INTELLECTUAL PROPERTY

We rely on a combination of trademark, copyright, trade secret and patent laws in the United States and other jurisdictions, as well as confidentiality procedures and contractual provisions to protect our proprietary technology and our brands and we maintain programs to protect and grow our rights. We also enter into confidentiality and proprietary rights agreements with our employees, consultants and other third parties and control access to software, services, documentation and other proprietary information.

SEASONALITY

Our fourth quarter has historically been our strongest quarter for new business and maintenance renewals. For a more detailed discussion, see the “Seasonal Nature of Deferred Revenue, Accounts Receivable and Operating Cash Flow” discussion in Management’s Discussion and Analysis.

SEGMENT REPORTING

We operate in a single reporting segment. Geographical financial information for fiscal years 2020, 2019 and 2018 is presented in Note 13 within the Notes to Consolidated Financial Statements included in Item 15 of this Annual Report on Form 10-K.

AVAILABLE INFORMATION

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on our website at www.qad.com, as soon as reasonably practicable after such reports have been electronically filed or otherwise furnished to the Securities and Exchange Commission. We intend to use our website as a means of disclosing material non-public information and for complying with our disclosure obligations under Regulation FD. Such disclosures will be included on our website in the ‘Investor Relations’ sections. Accordingly, investors should monitor such portions of our website and subscribe to our RSS feeds and email alerts per the “Investor Tools” instructions, in addition to following our press releases, SEC filings and public conference calls and webcasts. We are not including the information contained on our website as part of, or incorporating it by reference into, this annual report on Form 10-K.

ITEM 1A. RISK FACTORS

The environment in which we operate involves significant risks and is subject to factors beyond our control. You should consider the risk factors described below before investing in our stock as such risks may have a material adverse effect on our business, results of operations and financial condition and could cause the price of our stock to decline. Please note that the risk factors described below are not exhaustive.

COVID-19 will adversely affect our business and results of operations.

We expect that the global emergence of COVID-19 (novel coronavirus) will negatively impact our business and financial results in fiscal 2021 and possibly in future years depending on the length of the pandemic and its economic repercussions. As the virus has spread, it has significantly impacted the health and economic environment around the world. Our customers are global manufacturers and the closure of manufacturing sites and country borders, and the increase in unemployment are having and will continue to have negative implications on demand for goods, the supply chain, production of goods and transportation.

In the first quarter of fiscal 2021, we have seen professional services projects delayed as customers put projects on hold or slowed projects by extending go-lives to later dates. While we have the ability to deliver most of our professional services remotely, some of our professional services are more effective when performed directly with the customer onsite. In addition, some professional services relate to training and require the availability of the customer. We expect a negative impact on our professional services revenue and margins in the first quarter of fiscal 2021 and throughout the fiscal 2021 year. The impact to our manufacturing customers depends upon many factors. Some manufacturing customers are extremely busy producing record amounts; other customers are unaffected, are adjusting the products they make to those in high demand or are protected by government subsidies; and some customers are negatively impacted because demand for their goods has declined, transportation and supply chain problems exist or they are not able to keep their manufacturing facility open for production. Our customers who are negatively impacted by the virus have requested and may continue to request changes to payment terms. They may also be unable to pay their receivables, not renew cloud services or maintenance at the same amounts, defer new purchases of cloud services, professional services and licenses or go out of business. Any of these negative impacts to our customers will negatively impact our business, results of operations, overall financial performance and liquidity. While our revenue and earnings are relatively predictable as a result of our subscription and maintenance revenue which is recurring in nature, the effect of the COVID-19 pandemic will not be fully reflected in our results of operations and overall financial performance until future periods.

We are conducting business with substantial modifications to employee travel, employee work locations, and virtualization or cancellation of certain sales and marketing events, among other modifications. We deliver our products under a SaaS subscription model that allows us to deliver our cloud services remotely and support our customers at all times and around the globe, so they receive uninterrupted cloud services and support from QAD during these challenging times. In the first quarter of fiscal 2021, we have demonstrated the ability to support our customers remotely while maintaining our service level agreements. We do not anticipate significant issues due to the ability of our employees to work effectively from remote locations but future disruptions in our ability to deliver our cloud services to our customers could arise and impact our ability to meet our service level agreements. Such disruptions would negatively impact our customer's business, may trigger fees owed to customers and ultimately negatively impact our revenue, customer satisfaction and ultimately customer retention.

Our sales organization is meeting with customers and prospects virtually and performing demonstrations of our software services virtually. The virus may have an impact on our ability to close new cloud business and generate license revenue if customers delay purchasing decisions, don't have time to meet with us or go out of business altogether.

The extent of the impact of the COVID-19 pandemic on our future liquidity and operational performance will depend on certain developments, including the duration and spread of the outbreak, impact on our customers and our sales cycles, impact on our customer, employee and industry events, and effect on our vendors.

Risks associated with our cloud and subscription service offerings

Defects and disruptions in our services could diminish demand for our services and subject us to liability.

Our cloud service offerings are complex and incorporate a variety of hardware, network infrastructure and proprietary and third-party software, and may have errors or defects that could result in unanticipated downtime and disruptions for our customers and harm to our reputation and our business. We have from time to time found defects in our services and new defects may be discovered in the future, especially in connection with the integration of new technologies and the introduction of new services. As a result, we could lose future sales and existing customers could elect to cancel or make warranty or other claims against us and potentially expose us to the expense and risk of litigation.

Our revenue and profitability will be adversely affected if we do not properly manage our cloud service offerings.

We expend significant resources to improve the reliability and security of our cloud offerings and the cost of these investments could reduce our revenue and profitability. The pricing and other terms of some of our cloud agreements require us to make estimates and assumptions at the time we enter into these contracts that could differ from actual results. Early termination, increased costs or unanticipated delays could have an adverse effect on our profit margin and generate negative cash flow. Further, if we experience delays in implementing new cloud customers (whether due to product defects, system complexities or other factors) then customers may request discounts or other concessions, delay the deployment of additional users and sites, or decide to not go live and cancel their subscription after the initial term; all of which could adversely affect our revenue growth. If we fail to meet our system availability commitments or other customer obligations then we may be required to give credits or refund fees, and we may be subject to litigation and loss of customer business. For example, if we were to miss our system availability commitments then we are obligated under our standard customer contracts to issue one day's credit against future fees for each hour of system unavailability.

Continued growth could strain our personnel resources and infrastructure, and if we are unable to scale our operations and increase productivity, we may not be able to successfully implement our business plan.

We continue to experience significant growth in our customer base and personnel, which has placed a strain on our management, administrative, operational and financial infrastructure. We anticipate that additional investments or modifications and enhancements to our existing infrastructures will be required to scale our operations and increase productivity, to address the needs of our customers, to further develop and enhance our services, and to scale with our overall growth. Our success will depend in part upon our ability to manage our projected growth effectively. To do so, we must continue to increase the productivity of our existing employees and to hire, train and manage new employees as needed, and continue to improve our operational, financial and management controls, our reporting systems and procedures. We may also experience a decline in our revenue growth rate as our revenues increase to higher levels. If we fail to successfully scale our operations and increase productivity, we may be unable to execute our business plan.

Our subscription retention and net dollar retention rates are dependent upon a number of factors that may impact our ability to accurately predict growth in our cloud business.

Our cloud customers typically enter into subscription agreements with an initial term of 24 to 60 months. Our customers have no obligation to renew their subscriptions after the expiration of their initial subscription period, and some customers may elect (for a variety of reasons, including a business downturn) not to renew, or may elect to renew a lower number of users or modules. Growth in our cloud business may be affected by our inability to maintain high retention rates and sell additional features and services to our current customers, which could depend on a number of factors, including customers' satisfaction with our products and services, the prices of our offerings and general economic conditions. Growth of our cloud business is also contingent on the growth in our customers' businesses and downturns in our customers' businesses will negatively impact our revenue as customers lower the number of users. Specifically, with the COVID-19 pandemic, customers may renew their cloud agreements with a lower number of users or choose to cancel some of the functionality they are using. We cannot provide assurance that our subscriptions will be renewed at the same or higher levels of service and functionality, for the same number of users or for the same duration of time, if at all, or that we will be able to accurately predict future customer retention and net dollar retention rates. If our customers do not renew their subscriptions or if they renew on terms less favorable to us, the rate at which our cloud business grows may decline and our revenue may be reduced.

We rely on third-party hosting and other service providers.

We currently serve our cloud customers from third-party data center hosting facilities located in the United States and other countries. We do not control the operations of any of these facilities, and they may be subject to damage or interruption from earthquakes, floods, fires, power loss, telecommunications failures, public health issues such as the COVID-19 pandemic and similar events. They may also be subject to breaches of computer hardware and software security, break-ins, sabotage, intentional acts of vandalism and similar misconduct. And while we rely on service level agreements with these vendors, if they do not properly maintain their infrastructure or if they incur unplanned outages, our customers may experience performance issues or unexpected interruptions and we will not meet our service level agreement terms with our customers. Despite precautions taken at these facilities, the occurrence of a natural disaster or pandemic or an act of terrorism, a decision to close the facilities without adequate notice or other unanticipated problems at these facilities could result in lengthy interruptions in our service. Even with our disaster recovery precautions, our services could be interrupted. Any loss or interruption of these services could result in us not meeting our service level agreements with our customers which would significantly increase our expenses, reduce our ability to generate revenue and/or result in errors or a failure of our services which could adversely affect our business. These vendor services may not continue to be available at reasonable prices or on commercially reasonable terms, or at all. Additionally, our service level agreements with our customers are not the same terms as our service level agreements with our hosting vendors. Our agreements with our customers are generally more restrictive and result in higher fees paid to customers for unplanned outages than credits we may receive from our hosting vendors.

We may be exposed to liability and loss from cyber security breaches.

Our cloud services involve the storage and transmission of customers' proprietary information, and security breaches could expose us to a risk of loss of this information, resulting in litigation and possible liability. Security breaches may also include "denial-of-service" attacks, which can potentially disrupt our operations and our customers' operations. Security measures may be breached in numerous ways, such as remote or on-site break-ins by computer hackers, disgruntled employees or employee error during transfer of data to additional data centers or at any time, and result in unauthorized access to our own and our customers' data, intellectual property and other confidential business information. Additionally, third parties may attempt to induce employees or customers into disclosing sensitive information such as usernames, passwords or other information in order to gain access to our own and our customers' data, intellectual property and other confidential business information. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. A security breach could cause a loss of confidence in the security of our services, damage our reputation, disrupt our business, create legal liability and cause severe and potentially irreparable impact to our business. In the normal course of business, we are and have been the target of malicious cyber-attack attempts and have experienced other security incidents. To date, such identified security events have not had a material impact on our business operations or financial results, but there can be no assurance that future cyber-attacks will not have a material adverse impact.

Our solutions can be used to collect and store personal information of our customers' employees or customers, and therefore privacy concerns and governmental regulations could result in additional cost and liability to us or inhibit sales of our solutions.

Regulatory focus on privacy issues continues to increase and worldwide laws and regulations concerning the handling of personal information are expanding and becoming more complex. Many federal, state and foreign government bodies and agencies have adopted, or are considering adopting, laws and regulations regarding the collection, use, disclosure and retention of personal information. The European Union (EU) and the United States entered into a new framework (known as the Privacy Shield) in July 2016 to provide a mechanism for companies to transfer data from EU member states to the U.S. The Privacy Shield and other data transfer mechanisms are subject to legal challenge, which generates uncertainty about the legal basis for data transfers to the U.S. or interruption of such transfers. In the event a court blocks transfers to or from a particular jurisdiction on the basis that transfer mechanisms are not legally adequate, this could cause operational interruptions, liabilities and reputational harm. These and other requirements could increase the cost of compliance for us and our customers, restrict our and our customers' ability to store and process data, negatively impact our ability to offer our solutions in certain locations and limit our customers' ability to deploy our solutions globally. These consequences may be more significant in countries with legislation that requires data to remain localized "in country", as this could require us or our customers to establish data storage in other jurisdictions or apply local operational processes that are difficult and costly to integrate with global processes.

If we fail to comply with such laws and regulations, we may be subject to significant fines, penalties or liabilities for noncompliance, thereby harming our business. For example, the European Union's General Data Protection Regulation (GDPR), establishes requirements regarding the handling of personal data. Non-compliance with the GDPR may result in monetary penalties of up to 4% of worldwide revenue. Further, the United Kingdom's departure from the European Union has created uncertainty with regard to the requirements for data transfers between the United Kingdom and the EU and other jurisdictions. In addition, domestic data privacy laws, such as the California Consumer Privacy Act (CCPA), continue to evolve and could expose us to further regulatory burdens.

Risks associated with rapid technological change and complexity

The market for our products and services is characterized by rapid technological change.

Customer requirements for products can change rapidly as a result of innovation or change within the computer hardware and software industries, the introduction of new products and technologies and changes to industry standards. Our future success, including our cloud service offerings, will depend upon our ability to continue to enhance our current product line and to develop and introduce new products and services that keep pace with technological developments, satisfy increasingly sophisticated customer requirements, keep pace with industry and compliance standards and achieve market acceptance. Our failure to successfully develop or acquire, and market, product enhancements or new products could have a material adverse effect on our business. Despite our significant investments in research and development, we may not realize significant new revenue from these investments for several years, if at all.

New software releases and enhancements may adversely affect our subscription and license sales.

The actual or anticipated introduction of new products, technologies and industry standards can render existing products obsolete or unmarketable or result in delays in the purchase of those products. Significant delays in launching new products may also jeopardize our ability to compete. If we fail to anticipate or respond to developments in technology or customer requirements, have significant delays in the introduction of new products or fail to maintain overall customer satisfaction, this could have a material adverse effect on our business.

Services engagements are complex and pose material risks.

Services engagements may involve complex technological challenges, including those related to customer customization requests and our cloud environments, and such challenges demand a significant number of specialized technical resources. Our failure to successfully address these issues could have a material adverse effect on our business.

Changes in laws and regulations may negatively impact our business.

Federal, state or foreign government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations that affect our business and the industries that we serve, including life sciences. Changes in these laws or regulations could require us to modify our offerings, increase the cost of supporting those offerings, limit our customers'

adoption of those offerings, and increase the length and cost of sales cycles. Such events can have an adverse effect on our business and results.

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. Sales and use, value added and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert or may adopt laws that such taxes are applicable or that our presence in such jurisdictions is sufficient to require us to collect taxes, which could result in tax assessments, penalties and interest, and we may be required to collect such taxes in the future. Such tax assessments, penalties and interest or future requirements may adversely affect our financial results.

On March 27, 2020, the U.S. government enacted the “Coronavirus Aid, Relief and Economic Security Act (CARES Act). The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. We continue to examine the impacts the CARES Act may have on our business. Furthermore, other governments have and may continue to offer support to companies who operate in those countries. We are examining the impact of government subsidies, tax credits or other support in countries where QAD has operations.

Risks associated with our revenue, expenses and pricing

Our revenue and profits may fluctuate significantly.

Our quarterly and annual operating results have fluctuated in the past and may do so in the future. Such fluctuations have resulted from the seasonality of our customers’ manufacturing businesses and budget cycles and other factors. Moreover, there can be no assurance that our revenue will grow in future periods. As a result of fluctuating revenue or due to accelerated costs and deferred revenue resulting from cloud bookings there can be no assurance that we will be profitable on a quarterly or annual basis. Furthermore, the COVID-19 pandemic will negatively impact many manufacturing businesses which we expect will result in a decrease of our revenue, profits and liquidity.

Our financial forecasts are subject to uncertainty to the extent they are based on estimated sales forecasts.

Our revenues, and particularly our new cloud bookings business, software license revenue and services revenue, are difficult to forecast, and, as a result, our financial forecasts are subject to uncertainty. Specifically, our sales forecasts are based on estimates that our sales personnel make regarding the likelihood of potential sales, including their expected closing date and fee amounts. If these estimates are inaccurate then our financial forecasts may also be inaccurate.

The margins in our services business may fluctuate.

Services revenue is dependent upon the timing and size of customer orders, as well as upon our related license and subscription sales. If we are unable to keep our services employees engaged on billable matters then our profit margins may suffer. In addition, certain engagements may involve fixed price arrangements and significant staffing and subcontracting which require us to make estimates and assumptions at the time we enter into these contracts as well as throughout the contract to determine percent completion and revenue recognition. Variances between these estimates and assumptions and actual results could have an adverse effect on our profit margin and generate negative cash flow and negative services margins. To the extent that we are not successful in securing orders from customers to provide services, or to the extent we are not successful in achieving the expected margin on such services, our results of operations may be adversely affected.

The margins in our cloud service offerings may fluctuate.

Our cloud service offerings may involve fixed price arrangements, fixed and up-front costs and significant staffing which require us to make estimates and assumptions at the time we enter into these contracts. Variances between these estimates and assumptions and actual results could have an adverse effect on our profit margin and/or generate negative cash flow. To the extent that we are not successful in securing orders from customers to provide cloud services, or to the extent we are not successful in achieving the expected margin on such solutions, our results may be adversely affected.

Because we recognize revenue from cloud services over the term of the subscription, downturns or upturns in new business may not be immediately reflected in our operating results.

We generally recognize subscription revenue from customers ratably over the term of their subscription agreements. As a result, most of the subscription revenue we report in each quarter is the result of subscription agreements entered into during prior quarters. Consequently, a decline in new or renewed subscriptions in any one quarter may not be reflected in our revenue results for that quarter. Any such decline, however, will negatively affect our revenue in future quarters. Accordingly, the effect of significant downturns in sales and market acceptance of our cloud services, and potential changes in our attrition rate, 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 subscription revenue through additional sales in any period, as subscription revenue from new customers must be recognized over the applicable subscription term.

A significant portion of our revenue is derived from subscription and maintenance renewals with our existing installed base of customers.

Subscription and maintenance renewals are at the customer's discretion, and customers may elect not to renew or renew at a lower annual renewal value than the prior year. Further, it is our strategy to convert existing customers to our cloud services offering, which, if successful, will reduce maintenance revenue. If our existing customers discontinue maintenance or subscription to a significant degree, our revenues and results of operations will be adversely affected. Our cloud customers have the option to renew a lower number of users and/or a reduced number of modules which would also have a negative impact on revenue and results of operations.

Our subscription and maintenance retention rate is dependent upon a number of factors such as our ability to continue to develop and maintain our products, continue to recruit and retain qualified personnel to assist our customers, and promote the value of maintenance for our products to our customers.

Our subscription and maintenance retention rate is also dependent upon factors beyond our control such as technology changes and their adoption by our customers, budgeting decisions by our customers, changes in our customers' strategy or ownership and plans by our customers to replace our products with competing products. If our subscription or maintenance retention rate decreases, our revenue and results of operations would be adversely affected.

We have risks regarding our pricing and pricing models.

We are occasionally obliged to offer deep discounts and other favorable terms in order to match or exceed the product and service offerings of our competitors. Furthermore, we may be faced with general downward pricing pressure from competitors and the market in the future. For example, the COVID-19 pandemic could cause downward pricing pressure from customers requesting additional discounts or other pricing concessions. If we do not adapt our pricing models to reflect changes in customer demand resulting from rapid technological advances, such as those leading to alternative hosting and cloud service delivery offerings, our revenues could decrease. For example, if customer software usage evolves in ways that maintain or increase the value they derive from our products while decreasing traditional licensing metrics such as individual users, then if we do not adjust our pricing models accordingly then our revenues could decrease. Further, broad-based changes to our pricing models could adversely affect our revenues and operating results as our sales force implements, and our customers and accounting practices adjust to, the new pricing models.

We may have exposure to additional tax liabilities.

As a multinational organization, we are subject to income taxes as well as non-income taxes in the United States and in various foreign jurisdictions. Significant judgment is required in determining our worldwide income tax provision and other tax liabilities. Although we believe that our tax estimates are reasonable, the final determination of tax audits or tax disputes may differ from what is reflected in our historical income tax provisions and accruals.

Our tax rate could be adversely affected by several factors, many of which are outside of our control, including:

- Changes in jurisdictional revenue mix;
- Changing tax laws, regulations and interpretations thereof, including the changing landscape around digital taxation and the new US Tax Reform laws;

- Changes in tax rates;
- Changes to the valuation allowance on deferred tax assets; and
- Assessments and any related tax, interest or penalties.

If we are deemed to owe additional taxes, our results of operations may be adversely affected.

We report our results based on our calculations of the amount of taxes owed in the various tax jurisdictions in which we operate but taxing authorities may believe we owe a greater amount of income tax than we have reported.

Periodically, we may receive notices that a tax authority in a particular jurisdiction believes that we owe a greater amount of income tax than we have reported, in which case we may engage in discussions or possible dispute resolutions with these tax authorities. If the ultimate determination of our income taxes owed in any of these jurisdictions is for an amount in excess of the tax provision we have recorded or reserved for, our operating results, cash flows, and financial condition could be adversely affected. We are also subject to non-income taxes, such as payroll, sales, use, value-added, net worth, property and goods and services taxes, in the United States and in various foreign jurisdictions. Audits or disputes relating to non-income taxes may result in additional liabilities that could negatively affect our operating results, cash flows and financial condition.

Risks associated with our sales cycle

Our products involve a long sales cycle and the timing of sales is difficult to predict. Because the licensing or subscription of our primary products generally involves a significant commitment of capital or a long-term commitment by our customers, the sales cycle associated with a purchase of our products is generally lengthy.

This cycle varies from customer to customer and is subject to a number of significant risks over which we have little or no control, for example the COVID-19 (novel coronavirus) pandemic. The evaluation process that our customers follow generally involves many of their personnel and requires complex demonstrations and presentations to satisfy their needs. Significant effort is required by us to support this process, whether we are ultimately successful or not. If sales forecasted for a particular quarter are not realized in that quarter, then we are unlikely to be able to generate revenue from alternative sources in time to compensate for the shortfall. As a result, a lost or delayed sale could have a material adverse effect on our revenue and operating results.

Risks associated with our solutions

Our solutions, including licensed software, cloud services and other services, may contain defects, including security flaws, especially when first introduced or when new versions are released. The detection and correction of defects can be time consuming and costly. Defects in our solutions, including licensed third-party software, could affect the ability of our products to work with other hardware or software products. Defects could delay the development or release of new products or new versions of products and could adversely affect market acceptance of our products and our ability to conduct our cloud operations. Defects may also impair our ability to complete services implementations on time and within budget. Customers who rely on our solutions for applications that are critical to their businesses may have a greater sensitivity to such defects than customers for software products generally. Defects could expose us to product liability, performance and warranty claims as well as harm our reputation, which could adversely impact our future sales and operating results.

Dependence on third-party suppliers

We are dependent on Progress Software Corporation.

The majority of QAD Adaptive Applications are written in a programming language that is proprietary to Progress Software Corporation (or Progress). QAD Adaptive Applications do not run within programming environments other than Progress and therefore our customers must acquire rights to Progress software in order to use QAD Adaptive Applications. We have an agreement with Progress under which Progress licenses us to distribute and use Progress software related to our products. This agreement remains in effect unless terminated either by a written ten-year advance notice or due to a material breach that is not remedied. If Progress were to provide notice that it was terminating its agreement with us, this could have a material adverse effect on our business and prospects.

Our success is also dependent upon Progress continuing to develop, support and enhance its programming language, its toolset and its database, as well as the continued market acceptance of Progress products. A change in Progress' control,

management or direction may adversely impact our relationship with Progress and our ability to rely on Progress products in our business. We have in the past, and may in the future, experience product release delays because of delays in the release of Progress products or product enhancements. Any of these delays could have a material adverse effect on our business.

We are dependent on other third-party suppliers.

We resell certain software which we license from third parties other than Progress. There can be no assurance that these third-party software arrangements and licenses will continue to be available to us on terms that provide us with the third-party software we require or provide adequate functionality with our products on terms that adequately protect our proprietary rights or are commercially favorable to us.

Certain QAD Adaptive Applications are developed using embedded programming tools from Microsoft and Sun Microsystems (owned by our competitor Oracle) for the Microsoft .NET framework and Java Programming environments, respectively. We rely on these environments' continued compatibility with customers' desktop and server operating systems. In the event that this compatibility is limited, some of our customers may not be able to easily upgrade their QAD software. If the present method of licensing the .NET framework as part of Microsoft's Desktop Operating systems is changed and a separate price were applied to the .NET framework, our expenses could increase substantially. Similarly, if Oracle decided to charge fees or otherwise change the historical licensing terms for Java technology, our expenses could increase substantially. For both of the .Net and Java elements, we rely on market acceptance and maintenance of these environments and we may be adversely affected if these were withdrawn or superseded in the market.

Our partner agreements, including development, product acquisition and reseller agreements, contain confidentiality, indemnity and non-disclosure provisions for the third party and end user. Failure to establish or maintain successful relationships with these third parties or failure of these parties to develop and support their software, provide appropriate services and fulfill confidentiality, indemnity and non-disclosure obligations could have an adverse effect on us. We have been in the past, and expect to be in the future, party to disputes about ownership, license scope and royalty or fee terms with respect to intellectual property. Failure to prevail in any such dispute could have a material adverse effect on our business.

Risks associated with our proprietary rights and customer contracts

Our intellectual property may be at risk as a result of a variety of different factors.

We rely on a combination of protections provided by applicable copyright, trademark, patent and trade secret laws, as well as on confidentiality procedures and licensing arrangements, to establish and protect our rights in our software and related materials and information. We enter into agreements with each of our customers and partners to whom we grant access to QAD Adaptive Applications. These agreements contain confidentiality and non-disclosure provisions, a limited warranty covering our applications and indemnification from infringement actions related to our applications. In addition, we have in certain circumstances licensed our software to end-users and partners in both object code (machine-readable) and source code (human-readable) formats. While this practice facilitates customization, making software available in source code also makes it possible for others to copy or modify our software for impermissible purposes.

Despite our efforts, it may be possible for others to copy portions of our products, reverse engineer them or obtain and use information that we regard as proprietary, all of which could adversely affect our competitive position. Furthermore, there can be no assurance that our competitors will not independently develop technology similar to ours. In addition, we maintain significant intellectual property assets outside the United States, including in countries where the laws may not protect our proprietary rights to the same extent as in the United States.

The unauthorized use of our intellectual property rights may increase the cost of protecting these rights or reduce our revenues. We may initiate, or be subject to, claims or litigation for infringement of proprietary rights or to establish the validity of our proprietary rights, which could result in significant expense to us, cause product shipment delays, require us to enter royalty or licensing agreements and divert the efforts of our technical and management personnel from productive tasks, whether or not such litigation were determined in our favor.

We may be exposed to claims for infringement of intellectual property rights and breach of contract, and we may experience impairment of our own intellectual property rights.

Third parties may initiate proceedings against us claiming infringement or other misuse of their intellectual property rights and/or breach of our agreements with them. Further, while we actively monitor the adoption of open source software in our software development process, it is possible that our use of open source software may inadvertently subject our

proprietary software to public disclosure and impairment of our intellectual property rights. The likelihood of such instances may increase as the use of open source and other third-party code becomes more prevalent in the industry. Any such instances, regardless of validity, may cause us to:

- Pay license fees or monetary damages;
- Incur high legal fees in defense of such claims;
- Alter or stop selling our products;
- Satisfy indemnification obligations to our customers;
- Release source code to third parties, possibly under open source license terms; and
- Divert management's time and attention from operating our business.

We may be exposed to product liability claims and other liabilities.

While our customer agreements typically contain provisions designed to limit our exposure to product liability claims and other liability, we may still be exposed to liability in the event such provisions may not apply.

We have an errors and omissions insurance policy which may not totally protect us.

The Company has an errors and omissions insurance policy. However, this insurance may not continue to be available to us on commercially reasonable terms or at all, or a claim otherwise covered by our insurance may exceed our coverage limits, or a claim may not be covered at all. We may be subject to product liability claims or errors or omissions claims that could have an adverse effect on us. Moreover, defending a suit, regardless of its merits, could entail substantial expense and require the time and attention of key management personnel.

Risks associated with our market and the economy

The market in which we participate is highly competitive and if we do not compete effectively our operating results could be harmed.

The market for enterprise software solutions is highly competitive and subject to changing technology, shifting customer needs and introductions of new products and services. Many of our current and potential competitors enjoy substantial competitive advantages, such as greater name recognition, larger marketing budgets and substantially greater financial, technical and other resources. In addition, many of our current and potential competitors have established marketing relationships and access to larger customer bases. A number of companies offer products that are similar to our products and target the same markets. Any of these competitors may be able to respond more quickly to new or changing opportunities, technologies and market trends, and devote greater resources to the development, promotion and sale of their products. Our competitors may also offer extended payment terms or price reductions for their products and services, either of which could materially and adversely affect our ability to compete successfully. There can be no assurance that we will be able to compete successfully against current and future competitors or that the competitive pressures that we may face will not materially adversely affect our business, revenue and results of operations.

We are dependent upon achieving success in certain concentrated markets.

We have made a strategic decision to concentrate our product development, as well as our sales and marketing efforts, in certain vertical manufacturing sectors: automotive, life sciences, consumer products, food and beverage, high technology and industrial products. We also concentrate our efforts on certain geographies, where costs to expand our market or stay in compliance with local requirements could be extensive and require a large amount of resources. An important element of our strategy is the achievement of technological and market leadership recognition for our software products in these vertical sectors and geographies. The failure of our products to achieve or maintain substantial market acceptance in one or more of these vertical sectors or geographies could have an adverse effect on us. If any of these targeted vertical sectors or geographies experience a material slowdown or reduced growth, those conditions could adversely affect the demand for our products and revenue.

Unfavorable economic conditions may adversely impact our business, operating results and financial condition.

Our operations and performance are subject to the risks arising from worldwide economic conditions, which are themselves impacted by other events, such as financial crises, natural disasters, epidemics and political turmoil. These include adverse economic conditions associated with the COVID-19 (novel coronavirus) pandemic or other catastrophic events that may disrupt our business. In particular, the negative impact of economic conditions on manufacturing companies could have a substantial adverse effect on our sales, because our products are focused on supporting manufacturing companies. Uncertainty about global economic conditions may result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies and increased price competition as manufacturing companies may delay, reduce or forego spending in response to declining asset values, tight credit, high unemployment, natural disasters, political unrest and negative financial news. Such economic conditions may also result in our customers extending their payment periods or experiencing reduced ability to pay amounts owed to us. Uncertainty about global economic conditions could also increase the volatility of our stock price. If any of the foregoing occurs, our results of operations may be adversely affected.

Risks associated with our third-party relationships

We are dependent upon the development and maintenance of sales, services and marketing channels.

We sell and support our products through direct and indirect sales, services and support organizations throughout the world. We also maintain relationships with a number of consulting and systems integration organizations that we believe are important to our worldwide sales, marketing, service and support activities and to the implementation of our products. We also intend to actively increase and deepen such relationships to support growth in our business. We believe this strategy allows for additional flexibility in ensuring our customers' needs for services are met in a cost effective, timely and high-quality manner. We are aware that these third-party service providers do not work exclusively with our products and in many instances have similar, and often more established, relationships with our principal competitors. If these third parties exclusively pursue products or technology other than QAD software products or technology, or if these third parties fail to adequately support QAD software products and technology or increase support for competitive products or technology, we could be adversely affected.

Risks associated with acquisitions we may make

As part of our business strategy, we have made, and expect to continue to make, acquisitions of businesses or investments in companies that offer complementary products, services and technologies or expand our geographical presence. Such acquisitions or investments involve a number of risks which could adversely affect our business or operating results, including:

- Our business strategy may not be furthered by an acquisition as we planned;
- We may be unable to retain customers, vendors, distributors, business partners or other relationships associated with the acquired business;
- Our due diligence may not identify significant liabilities or deficiencies associated with the business, assets, products, financial condition or accounting practices of an acquired company;
- We may have difficulty integrating an acquired business due to incompatible business cultures;
- We may incur significant integration costs related to assimilating the operations and personnel of acquired companies;
- Acquisition costs may result in charges in a particular quarter, increasing variability in our quarterly earnings;
- We may not realize the anticipated revenue increase from an acquisition;
- We may be unable to realize the value of the acquired assets relative to the acquisition cost;
- If we fail to complete an announced acquisition, our stock price could fall to the extent the price reflects an assumption that such acquisition will be completed, and we may experience negative publicity adversely impacting our relationships with our customers, vendors and employees; and
- Acquisitions may distract management from our existing businesses.

These factors could have a material adverse effect on our business, financial condition and operating results. In addition such acquisitions may cause our future quarterly financial results to fluctuate due to costs related to an acquisition, such as the elimination of redundant expenses or write-offs of impaired assets recorded in connection with acquisitions. Also, consideration paid for any future acquisitions could include our stock. As a result, future acquisitions could cause dilution to existing stockholders and to earnings per share, though the likelihood of voting dilution is limited by the ability of the Company to use low-voting Class A common stock as consideration for potential acquisitions. Furthermore, we may incur significant debt to pay for future acquisitions or investments or our use of cash to pay for acquisitions may limit other potential uses of our cash, including stock repurchases, dividend payments and retirement of outstanding indebtedness.

Risks associated with our international operations

Our operations are international in scope, exposing us to additional risk.

We derive over half of our total revenue from sales outside the United States. A significant aspect of our strategy is to focus on developing business in emerging markets. Our operating results could be negatively impacted by a variety of factors affecting our foreign operations, many of which are beyond our control. These factors include currency fluctuations, economic, political or regulatory conditions in a specific country or region, trade protection measures and other regulatory requirements. Additional risks inherent in international business activities generally include, among others:

- Longer accounts receivable collection cycles;
- Costs and difficulties of managing international operations and alliances;
- Greater difficulty enforcing intellectual property rights;
- Import or export requirements;
- Uncertainty related to negotiations between the UK and EU concerning their future relationship, following the ratification of the Brexit withdrawal agreement and the upcoming end of the transition period on December 31, 2020 that could disrupt the sale of our products and services and the movement of our people between the United Kingdom and the European Union;
- Compliance with multiple, conflicting, ambiguous or evolving governmental laws and regulations, including employment, tax, privacy, anti-corruption, import/export, antitrust, data transfer, storage and protection, and industry-specific laws and regulations, including rules related to compliance by our third-party resellers and our ability to identify and respond timely to compliance issues when they occur;
- Operating in geographies with a higher inherent risk of corruption, which could adversely affect our ability to maintain compliance with domestic and international laws, including, but not limited to, the U.S. Foreign Corrupt Practices Act and other anti-corruption laws; and
- Other factors beyond our control, such as terrorism, war, natural disasters and pandemics, including the COVID-19 pandemic.

We may experience foreign currency gains and losses.

We conduct a portion of our business in currencies other than the United States dollar. Our revenues and operating results may be negatively affected by fluctuations in foreign currency exchange rates. Changes in the value of major foreign currencies, including the euro and British pound, relative to the United States dollar can significantly and adversely affect our revenues, expenses and operating results.

Changes in accounting principles, or interpretations thereof, could have a significant impact on our financial position and results of operations.

We prepare our Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America (GAAP). A change in these principles can have a significant impact on our reported results and may even retroactively affect previously reported transactions. The adoption of new or revised accounting principles may require that we make significant changes to our systems, processes and controls.

We are exposed to fluctuations in the market values of our investments

Given the global nature of our business, we have investments both domestically and internationally. Credit ratings and market values of these investments can be negatively impacted by liquidity, credit deterioration or losses, financial results, foreign exchange rates, or other factors. As a result, the value or liquidity of our cash equivalents and short-term investments could decline, thus adversely affecting our financial condition and operating results.

The market for our Class A and Class B common stock is volatile

Our stock price could become more volatile and investments could lose value.

The market price of our common stock and the number of shares of each class traded each day has experienced significant fluctuations and may continue to fluctuate significantly. The market price for our common stock may be affected by a number of factors, including, but not limited to:

- Shortfalls in our expected net revenue, earnings or key performance metrics;
- Changes in recommendations or estimates by securities analysts;
- The announcement of new products by us or our competitors;
- Quarterly variations in our or our competitors' results of operations;
- A change in our dividend or stock repurchase activities;
- Developments in our industry or changes in the market for technology stocks;
- Changes in rules or regulations applicable to our business; and
- Other factors, including economic instability, global pandemics such as COVID-19 and changes in political or market conditions.

The dual class structure of our common stock as set forth in our charter documents could adversely impact the market for our common stock.

Our dual-class stock structure could adversely impact the market for our stock. The liquidity of our common stock may be adversely impacted by our dual-class structure because each class has less of a public float than it would if we had a single class of common stock. In addition, there are fewer Class B shares than Class A shares and Class B shares may be less desirable to the public due to the 20% higher dividend on Class A shares. Also, the holding of lower voting Class A common stock may not be permitted by the investment policies of certain institutional investors or may be less attractive to managers of certain institutional investors.

If research analysts do not publish research about our business or if they issue unfavorable commentary or downgrade our common stock, our stock price and trading volume could decline.

The trading market for our common stock depends in part on the research and reports that research analysts publish about us and our business. If we do not maintain adequate research coverage, or if one or more analysts who covers us downgrades our stock or publishes inaccurate or unfavorable research about our business, the price of our common stock could decline. If one or more of the research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our common stock could decrease, which could cause our stock price or trading volume to decline.

We are obligated to maintain proper and effective internal control over financial reporting. We may not complete our analysis of our internal control over financial reporting in a timely manner, or this internal control may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

We are required, pursuant to the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting. This

assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting, as well as a statement that our auditors have issued an attestation report on our internal controls.

While we were able to determine in our management's report for fiscal 2020 that our internal control over financial reporting is effective, as well as provide an unqualified attestation report from our independent registered public accounting firm to that effect, we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion or our independent registered public accounting firm may not be able to formally attest to the effectiveness of our internal control over financial reporting in the future. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting that we are unable to remediate before the end of the same fiscal year in which the material weakness is identified, we will be unable to assert that our internal controls are effective. If we are unable to assert that our internal control over financial reporting is effective, or if our auditors are unable to attest to the effectiveness of our internal controls or determine we have a material weakness in our internal controls, we could lose investor confidence in the accuracy and completeness of our financial reports, which could cause the price of our common stock to decline.

If we are unable to pay quarterly dividends, our reputation and stock price may be harmed.

Our payment of dividends may require the use of a significant portion of our cash earnings. As a result, we may not retain a sufficient amount of cash to fund our operations or finance future growth opportunities, new product development initiatives and unanticipated capital expenditures which could adversely affect our financial performance. Additionally, our board of directors may, at its discretion, decrease or entirely discontinue the payment of dividends at any time. Our ability to pay dividends will depend on our ability to generate sufficient cash flows from operations in the future. This ability may be subject to certain economic, financial, competitive and other factors that are beyond our control. Any failure to pay dividends may negatively impact our reputation and investor confidence in us and may negatively impact the price of our common stock.

Our common stock ownership is concentrated

The dual class structure of our common stock as set forth in our charter documents has the effect of concentrating voting control with certain stockholders, including Pamela Lopker, thus limiting our other stockholders' ability to influence corporate matters.

Our Class B common stock has one vote per share and our Class A common stock has 1/20th vote per share. Stockholders who hold shares of our Class B common stock together held approximately 80% of the voting power of our outstanding capital stock as of January 31, 2020. As of January 31, 2020, Pamela Lopker beneficially owned approximately 32% of the outstanding shares of our Class A common stock and approximately 76% of the outstanding shares of our Class B common stock, representing approximately 67% of the voting power of our outstanding capital stock. Currently she has sufficient voting control to determine the outcome of a stockholder vote concerning:

- The election and removal of all members of our board of directors;
- The merger, consolidation or sale of the Company or all of our assets; and
- All other matters requiring stockholder approval, regardless of how our other stockholders vote their shares.

In addition, the holders of our Class B common stock collectively will continue to be able to control all matters submitted to our stockholders for approval even if their stock holdings represent less than 50% of the outstanding shares of our common stock because of the 20-to-1 voting ratio between our Class B and Class A common stock. This concentrated control will limit the ability of our Class A stockholders to influence corporate matters for the foreseeable future, and, as a result, the market price of our Class A common stock could be adversely affected.

This concentrated control limits the ability of our other stockholders to influence corporate matters and also limits the liquidity of the shares owned by other stockholders. Should the interests of Pamela Lopker differ from those of other stockholders, the other stockholders may not be afforded the protections of having a majority of directors on the board who are independent from our principal stockholders or our management. For example, Pamela Lopker's concentrated control could discourage others from initiating potential merger, takeover or other change of control transactions; and, transactions could be pursued that our other stockholders do not view as beneficial. As a result, the market price of our Class A and Class B common stock could be adversely affected.

We are not required to comply with certain corporate governance rules of NASDAQ, that would otherwise apply to us as a company listed on NASDAQ, because we are a controlled company.

Specifically, we are not required to have a majority of independent directors or a compensation committee comprised solely of independent directors; select, or recommend for the board's selection, director nominees by a majority of independent directors or a nominating committee comprised solely of independent directors; determine officer compensation by a compensation committee comprised solely of independent directors or by a majority of the board upon recommendation of a compensation committee comprised solely of independent directors; and satisfy certain responsibilities of the compensation committee prior to retaining or receiving advice from a compensation consultant, legal counsel or other advisor to the compensation committee.

Provisions in the Company's charter documents or Delaware law could discourage a takeover that stockholders may consider favorable.

Our Certificate of Incorporation contains certain other provisions that may have an "anti-takeover" effect. The Certificate of Incorporation contains authority for the Board to issue up to 5,000,000 shares of preferred stock without stockholder approval. Although the Company has no present intention to issue any such shares, we could issue such shares in a manner that deters or seeks to prevent an unsolicited bid for us. The Certificate of Incorporation also does not provide for cumulative voting and, accordingly, a significant minority stockholder could not necessarily elect any designee to the board of directors. In addition, Section 203 of the Delaware Corporation Law may discourage, delay, or prevent a change in control of us by imposing certain restrictions on various business combinations. Furthermore, our dual class structure concentrates the voting power of our stock in Pamela Lopker who would have the ability to control the outcome of a stockholder vote. As a result of these provisions in the Company's Certificate of Incorporation, including our dual class structure, and Delaware law, our stockholders may be deprived of an opportunity to sell their shares at a premium over prevailing market prices and it would be more difficult to replace our directors and management.

We are dependent upon highly skilled personnel

Our performance depends on the talents and efforts of highly skilled employees, including the continued service of a relatively small number of key technical and senior management personnel. In particular, our Chief Executive Officer, Anton Chilton, and President, Pamela Lopker, are critical to the overall management of QAD, maintenance of our culture and setting our strategic direction. All of our executive officers and key employees are at-will employees and we do not have key-person insurance covering any of our employees. Our future success depends on our continuing ability to attract and retain highly skilled personnel in all areas of our organization. Competition for such personnel is intense and many of our competitors are larger and have greater financial resources for attracting skilled personnel. The loss of key technical and senior management personnel or the inability to attract and retain additional qualified personnel could have an adverse effect on our continued ability to compete effectively.

We have hired personnel in countries where advanced technical expertise and other expertise are available at lower costs to improve our cost structure. We may experience competition for employees in these countries, which may negatively affect our employee retention efforts and increase our expenses in an effort to offer a competitive compensation program.

Catastrophic events may disrupt our business

Our corporate headquarters, including network infrastructure, internal technology systems and certain of our research and development activities, is located in Southern California, a region susceptible to fires, mudslides and seismic activity. Additionally, certain of our other facilities and those of our suppliers and third-party data hosting services, may be located in regions affected by natural disasters. Our corporate headquarters has been disrupted in the past, and any of the aforementioned facilities, suppliers and hosting services may be disrupted in the future, by significant natural disasters. Such a natural disaster, as well as a terrorist attack, cyber-attack, war or other catastrophic event, may result in power loss, telecommunications failure, loss of access to the Internet, software or hardware malfunction, or physical access restrictions that our disaster recovery plans do not adequately address. Further, health crises such as the COVID-19 (novel coronavirus) pandemic can lead to quarantines and other disruptions impacting our ability to operate our business, and impacting our customers', partners' and suppliers' ability to run their businesses. Such disruptions can result in delays or cancellations of sales cycles, reductions or cancellations of the services we currently provide our customers, delays in our product development, interruptions in our customer services, breaches of data security and loss of critical data, all of which may have a material adverse effect on our business, operating results and financial condition, and negatively impact our reputation.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

QAD's corporate headquarters are located in Santa Barbara, California. The corporate headquarters are owned by QAD and consist of approximately 120,000 square feet situated on 28 acres of land.

In addition to the corporate headquarters, QAD owns a facility in Dublin, Ireland and leases over 25 offices throughout the world with lease agreements ending on various dates through fiscal year 2032. QAD's leased properties include offices in the United States, Belgium, France, Germany, Ireland, Italy, Poland, Spain, The Netherlands, United Kingdom, Australia, China, India, Indonesia, Japan, Singapore, Thailand, Brazil and Mexico. QAD will seek to review lease commitments in the future as may be required. QAD anticipates that its current domestic and international facilities are substantially sufficient to meet its needs for at least the next twelve months.

ITEM 3. LEGAL PROCEEDINGS

We are not party to any material legal proceedings. We are from time to time party, either as plaintiff or defendant, to various legal proceedings and claims which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material adverse effect on our consolidated financial position or results of operations.

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

QAD Class A Common Stock and Class B Common Stock are traded on the NASDAQ under the symbols "QADA" and "QADB", respectively. The following table reflects the range of high and low sale prices of our Common Stock as reported by NASDAQ:

| | QADA | | QADB | |
|----------------------|-----------|------------|-----------|------------|
| | Low Price | High Price | Low Price | High Price |
| Fiscal 2020: | | | | |
| Fourth quarter | \$ 46.55 | \$ 54.54 | \$ 33.76 | \$ 38.04 |
| Third quarter | 35.00 | 47.60 | 27.50 | 36.53 |
| Second quarter | 38.32 | 49.65 | 29.25 | 34.75 |
| First quarter..... | 40.50 | 47.54 | 29.89 | 33.89 |
| | | | | |
| | QADA | | QADB | |
| | Low Price | High Price | Low Price | High Price |
| Fiscal 2019: | | | | |
| Fourth quarter | \$ 38.39 | \$ 48.04 | \$ 29.50 | \$ 35.00 |
| Third quarter | 40.91 | 61.80 | 28.35 | 49.40 |
| Second quarter | 44.45 | 55.35 | 32.07 | 44.24 |
| First quarter..... | 39.33 | 50.35 | 27.00 | 36.75 |

Holders

As of March 31, 2020, there were approximately 135 shareholders of record of our Class A common stock and approximately 120 shareholders of record of our Class B common stock. Because many of our shares of common stock are held by brokers or other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by the record holders.

Equity Compensation Plan

For equity compensation plan information, please refer to Item 12 in Part III of this Annual Report.

Dividends

We declared four quarterly cash dividends in fiscal 2020 of \$0.072 and \$0.06 per share of Class A and Class B stock, respectively. Continuing quarterly cash dividends are subject to profitability measures, liquidity requirements of QAD and Board discretion.

Recent Sales of Unregistered Securities

None.

Issuer Purchases of Equity Securities

None.

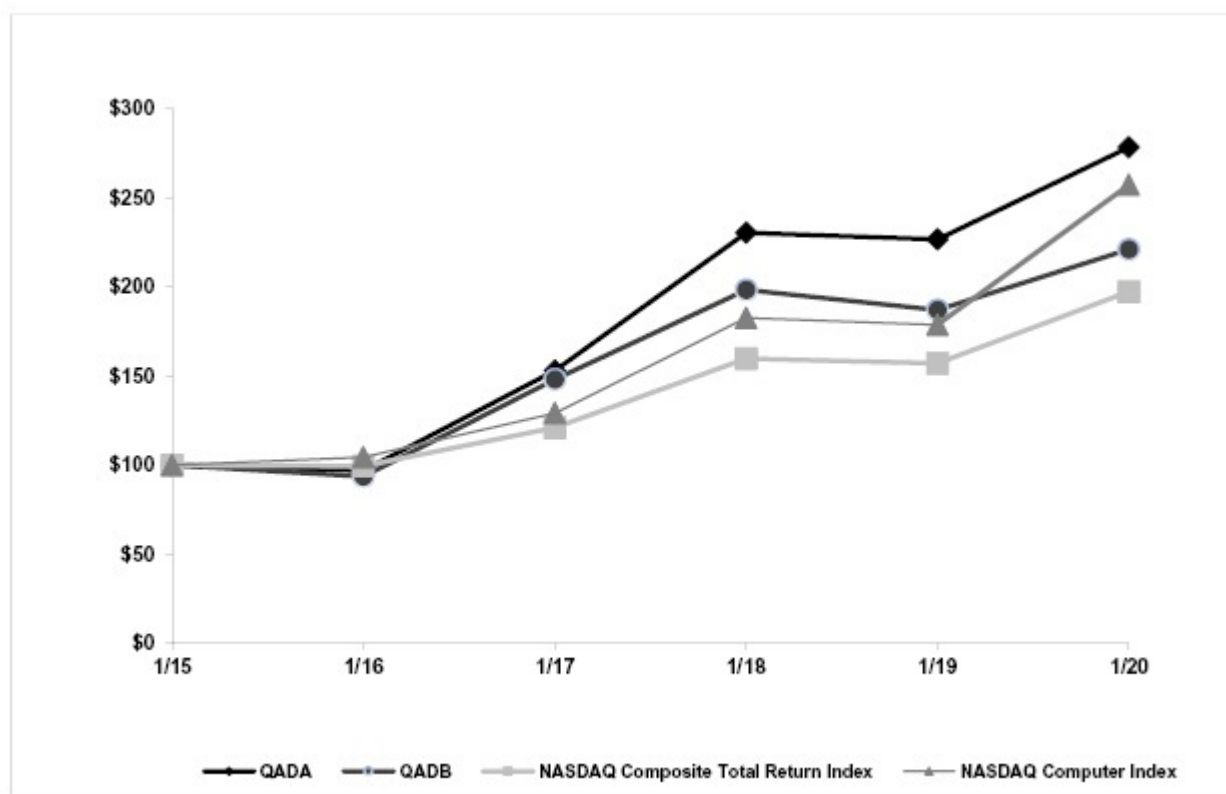
STOCKHOLDER RETURN PERFORMANCE GRAPH

The line graph below compares the annual percentage change in the cumulative total stockholder return on QAD's common stock with the cumulative total return of the NASDAQ Composite Total Return Index and the NASDAQ Computer Index, on an annual basis, for the period beginning January 31, 2015 and ending January 31, 2020.

The graph assumes that \$100 was invested in QAD common stock on January 31, 2015 and that all dividends were reinvested. Historic stock price performance should not be considered indicative of future stock price performance.

The following Share Performance Graph shall not be deemed to be "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filings under the Securities Act of 1933 or Securities Exchange Act of 1934, each as amended, except to the extent that the Company specifically incorporates it by reference into such filing.

COMPARISON OF CUMULATIVE TOTAL RETURN AMONG QAD INC., THE NASDAQ COMPOSITE TOTAL RETURN INDEX, AND THE NASDAQ COMPUTER INDEX



| Measurement Periods (Annually from Fiscal Year 2015 through Fiscal Year 2020) | QADA | QADB | NASDAQ Composite Total Return Index | NASDAQ Computer Index |
|----------------------------------------------------------------------------------------|--------|--------|----------------------------------------------|-----------------------------|
| 01/31/15..... | 100.00 | 100.00 | 100.00 | 100.00 |
| 01/31/16..... | 96.86 | 93.60 | 99.54 | 104.50 |
| 01/31/17..... | 153.18 | 148.10 | 121.13 | 129.22 |
| 01/31/18..... | 230.39 | 198.34 | 159.89 | 182.68 |
| 01/31/19..... | 226.74 | 187.09 | 157.10 | 178.80 |
| 01/31/20..... | 278.41 | 221.11 | 197.42 | 257.26 |

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," and the consolidated financial statements and related notes thereto included in Item 8 of this Form 10-K to fully understand factors that may affect the comparability of the information presented below. The financial data for the fiscal years ended January 31, 2020 and 2019, are derived from, and are qualified by reference to, the audited consolidated financial statements that are included in this Form 10-K. The Consolidated Statements of Operations and the Consolidated Statements of Cash Flows data for the fiscal year ended January 31, 2018, are derived from, and are qualified by reference to, the audited consolidated financial statements that are included in this Form 10-K. The Consolidated Balance Sheet data for the fiscal year ended January 31, 2018, and the remaining financial data for the fiscal years ended January 31, 2017 and 2016, are derived from audited, consolidated financial statements which are not included in this Form 10-K.

The consolidated balance sheet data as of January 31, 2020 reflects the adoption of Accounting Standards Update (ASU) No. 2016-02 *Leases (Topic 842)*. The consolidated statement of operations data for fiscal 2019 and the selected consolidated balance sheet data as of January 31, 2019 reflect the adoption of ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* and ASU2016-16 *Intra-entity Transfers of Assets Other Than Inventory*.

| | Years Ended January 31, | | | | |
|-----------------------------------------|---------------------------------------|-----------|------------|-------------|-----------|
| | 2020 (1) | 2019 (2) | 2018 (3) | 2017 (4) | 2016 (5) |
| | (in thousands, except per share data) | | | | |
| STATEMENTS OF OPERATIONS DATA: | | | | | |
| Revenues: | | | | | |
| Subscription Fees | \$ 107,168 | \$ 91,861 | \$ 69,615 | \$ 52,167 | \$ 38,806 |
| License fees..... | 16,570 | 25,568 | 25,807 | 23,633 | 29,891 |
| Maintenance and other | 117,896 | 122,936 | 128,142 | 130,406 | 132,962 |
| Professional services | 69,138 | 92,651 | 81,454 | 71,767 | 76,193 |
| Total revenue | 310,772 | 333,016 | 305,018 | 277,973 | 277,852 |
| Operating (loss) income | (5,688) | 9,573 | (3,074) | 3,364 | 10,171 |
| Net (loss) income | \$ (15,949) | \$ 10,428 | \$ (9,065) | \$ (15,450) | \$ 8,912 |
| Basic net (loss) income per share: | | | | | |
| Class A | \$ (0.82) | \$ 0.55 | \$ (0.49) | \$ (0.84) | \$ 0.49 |
| Class B | \$ (0.69) | \$ 0.46 | \$ (0.41) | \$ (0.70) | \$ 0.41 |
| Diluted net (loss) income per share: | | | | | |
| Class A | \$ (0.82) | \$ 0.50 | \$ (0.49) | \$ (0.84) | \$ 0.47 |
| Class B | \$ (0.69) | \$ 0.44 | \$ (0.41) | \$ (0.70) | \$ 0.40 |
| Dividends declared per common share: | | | | | |
| Class A | \$ 0.29 | \$ 0.29 | \$ 0.29 | \$ 0.29 | \$ 0.29 |
| Class B | \$ 0.24 | \$ 0.24 | \$ 0.24 | \$ 0.24 | \$ 0.24 |
| BALANCE SHEET AND CASH FLOW DATA: | | | | | |
| Cash and equivalents | 136,717 | 139,413 | 147,023 | 145,082 | 137,731 |
| Working capital | 69,610 | 78,350 | 70,960 | 80,351 | 86,791 |
| Total assets..... | 322,804 | 317,174 | 299,817 | 280,890 | 287,341 |
| Current portion of long-term debt | 503 | 487 | 466 | 446 | 422 |
| Long-term debt..... | 12,341 | 12,836 | 13,313 | 13,767 | 14,191 |
| Total stockholders' equity..... | 116,065 | 133,247 | 105,628 | 112,686 | 128,006 |
| Cash provided by operations | 16,845 | 19,007 | 10,418 | 18,680 | 24,057 |

- (1) Fiscal year 2020 includes a net increase in valuation allowances of \$16.2 million, primarily related to the placement of a valuation allowance against Ireland net deferred tax assets.
- (2) Fiscal year 2019 net income includes a \$1.3 million reversal of the 2017 Tax Reform Act (the Tax Act) estimated tax liability recorded in fiscal year 2018.
- (3) Fiscal year 2018 net loss includes a \$2.0 million estimated tax liability, representing the Company's best estimate of the impact of the Tax Act in accordance with QAD's understanding of the Tax Act and the related guidance available.
- (4) Fiscal year 2017 includes placement of a valuation allowance of \$16.3 million against U.S. federal and state net deferred tax assets.
- (5) Fiscal year 2016 includes the issuance of 450,000 shares of Class A common stock at \$20.00 per share for net proceeds to the Company of \$8.4 million after deduction of offering expenses as a result of an option to purchase additional shares exercised in full by the underwriters related to the fiscal year 2015 stock issuance.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

INTRODUCTION

The following discussion should be read in conjunction with our Consolidated Financial Statements and Notes to Consolidated Financial Statements included in Item 15 of this Annual Report on Form 10-K.

BUSINESS OVERVIEW

QAD (QAD, the Company, we or us) is a leader in cloud-based enterprise software solutions for global manufacturing companies. Our solutions, called QAD Adaptive Applications, are designed specifically for automotive suppliers, life sciences, consumer products, food and beverage, high technology and industrial products manufacturers. QAD software offers a full set of core manufacturing enterprise resource planning and supply chain planning capabilities. Our architecture, called the QAD Enterprise Platform, allows manufacturers to upgrade existing functionality by module; and extend or create new applications, providing manufacturers with the flexibility they need to innovate and rapidly adapt to change.

We have four principal sources of revenue:

- Subscription of QAD Adaptive Applications through our cloud offering in a Software as a Service (SaaS) model as well as other hosted applications;
- License purchases of QAD Adaptive Applications;
- Maintenance and support, including technical support, training materials, product enhancements and upgrades; and
- Professional services, including implementations, technical and application consulting, training, migrations and upgrades.

We operate primarily in the following four geographic regions: North America, Latin America, EMEA and Asia Pacific. In fiscal 2020, approximately 49% of our total revenue was generated in North America, 29% in EMEA, 15% in Asia Pacific and 7% in Latin America. The majority of our revenue is generated from global customers who have operations in multiple countries throughout the world. A significant portion of our revenue and expenses are derived from international operations which are primarily conducted in foreign currencies. As a result, changes in the value of foreign currencies relative to the U.S. dollar have impacted our results of operations and may impact our future results of operations. At January 31, 2020, we employed approximately 1,920 employees worldwide, of which 630 employees were based in North America, 610 employees in EMEA, 570 employees in Asia Pacific and 110 employees in Latin America.

Our customer base and our target markets are primarily global manufacturing companies; therefore, our results are heavily influenced by the state of the manufacturing economy on a global basis. As a result, our management team monitors several economic indicators, with particular attention to the Global and Country Purchasing Managers' Indexes (PMI). The PMI is a survey conducted on a monthly basis by polling businesses that represent the makeup of respective sectors. Since most of our customers are manufacturers, our revenue has historically correlated with fluctuations in the manufacturing PMI. Global macro-economic trends and manufacturing spending are important barometers for our business, and the health of the U.S., Western European and Asian economies have a meaningful impact on our financial results.

We are transitioning our business model from selling perpetual licenses to providing access to our software on a subscription basis as part of our cloud offering. During fiscal 2020, we closed most of our new customer deals in the cloud. Subscription revenue grew 17% in fiscal 2020 compared to fiscal 2019 and our twelve-month trailing subscription billings grew by 23%, with a three-year compound annual growth rate (CAGR) of 29%. In addition, we have converted approximately 20% of our existing customers from on-premises licenses to our cloud solutions. Recurring revenue, which we define as subscription revenue plus maintenance revenue, accounted for 73% of total revenue for fiscal 2020. By reducing our customers' up-front costs and providing QAD Adaptive Applications with continuous application and infrastructure support in secure and resilient environments, we expect our cloud business model will be more attractive than perpetual licenses. We expect recurring revenue to remain a majority of total revenue as our subscription revenue continues to grow.

In December 2019, a strain of coronavirus (COVID-19) was reported in Wuhan, China and by January 24, 2020 the Chinese government announced mandatory home confinement and the closure of all workplaces, schools and public establishments. Given that our fiscal year end is January 31st and China represents 4% of our revenue, the coronavirus had a minimal impact on our fiscal 2020 results. As the coronavirus has spread, it has significantly impacted the health and

economic environment around the world and many governments have closed most public establishments, including restaurants, workplaces and schools. Our customers are global manufacturers and the closure of manufacturing sites, country borders and the increase in unemployment are having and will continue to have negative implications on demand for goods, the supply chain, production of goods and transportation. A negative impact on our manufacturing customers may cause them to request extended payment terms, delayed invoicing, higher discounts, lower renewal amounts or cancellations. Any of these actions will have a negative impact on our financial results and liquidity in fiscal 2021. We deliver our products under a SaaS subscription model that allows us to deliver our services remotely and support our customers around the world at all times, so they receive uninterrupted services and support from QAD during these challenging times. We believe this example of proven uninterrupted services during a time of disruption will motivate new and existing customers to migrate to the cloud in the long term.

In the first quarter of fiscal 2021 we have seen an impact to professional services revenue as our customers delay projects or elongate them by extending their planned go-live date. We have also received some customer requests for payment term changes. We expect a negative impact to professional services revenue and margins in the first quarter of fiscal 2021 and throughout the fiscal year. The impact of changes in payment terms or delayed payments is unknown at this time. February and March days sales outstanding (DSOs) were consistent with historical trends. Significant delays in payments from customers would impact our DSOs and liquidity and may have an adverse impact on revenue. The extent of the impact of the COVID-19 on our future liquidity and operational performance will depend on certain developments, including the duration and spread of the outbreak, the impact to our customers operations, the impact to our sales cycles; and the effect on our suppliers.

RESULTS OF OPERATIONS

We operate in several geographical regions as described in Note 13 “Business Segment Information” within the Notes to Consolidated Financial Statements. In order to present our results of operations without the effects of changes in foreign currency exchange rates, we provide certain financial information on a “constant currency basis”, which is in addition to the actual financial information presented in the following tables. In order to calculate our constant currency results, we apply the current foreign currency exchange rates to the prior period results.

Revenue

| | Year Ended January 31, 2020 | Year Ended January 31, 2019 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|------|
| (in thousands) | | | | | \$ | % |
| Revenue | | | | | | |
| Subscription fees | \$ 107,168 | \$ 91,861 | \$ 16,473 | \$ (1,166) | \$ 15,307 | 17% |
| Percentage of total revenue | 35% | 28% | | | | |
| License fees | 16,570 | 25,568 | (8,479) | (519) | (8,998) | -35% |
| Percentage of total revenue | 5% | 7% | | | | |
| Maintenance | 117,896 | 122,936 | (2,734) | (2,306) | (5,040) | -4% |
| Percentage of total revenue | 38% | 37% | | | | |
| Professional services | 69,138 | 92,651 | (21,310) | (2,203) | (23,513) | -25% |
| Percentage of total revenue | 22% | 28% | | | | |
| Total revenue | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ (16,050)</u> | <u>\$ (6,194)</u> | <u>\$ (22,244)</u> | -7% |

| | Year Ended January 31, 2019 | Year Ended January 31, 2018 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|-----|
| (in thousands) | | | | | \$ | % |
| Revenue | | | | | | |
| Subscription fees | \$ 91,861 | \$ 69,615 | \$ 22,398 | \$ (152) | \$ 22,246 | 32% |
| Percentage of total revenue | 28% | 23% | | | | |
| License fees | 25,568 | 25,807 | (293) | 54 | (239) | -1% |
| Percentage of total revenue | 7% | 8% | | | | |
| Maintenance | 122,936 | 128,142 | (5,914) | 708 | (5,206) | -4% |
| Percentage of total revenue | 37% | 42% | | | | |
| Professional services | 92,651 | 81,454 | 11,349 | (152) | 11,197 | 14% |
| Percentage of total revenue | 28% | 27% | | | | |
| Total revenue | <u>\$ 333,016</u> | <u>\$ 305,018</u> | <u>\$ 27,540</u> | <u>\$ 458</u> | <u>\$ 27,998</u> | 9% |

Total Revenue. On a constant currency basis, total revenue was \$310.8 million for fiscal 2020, representing a \$16.0 million, or 5%, decrease from \$326.8 million for fiscal 2019. The primary reason for the decrease in total revenue was due to lower professional services revenue. Our results for fiscal 2020 also included decreases in license revenue and maintenance

revenue. As our existing customers convert from on-premises licenses to using our software in the cloud, we expect license revenue and maintenance revenue will continue to decline. These decreases were offset by an 18% increase in subscription revenue, on a constant currency basis, as we are focused on selling our software solutions to new customers in the cloud. Revenue outside the North America region as a percentage of total revenue was 51% and 52% for fiscal 2020 and 2019, respectively. On a constant currency basis, total revenue decreased across all regions during fiscal 2020 when compared to the prior year.

In fiscal 2020 and fiscal 2018, no single customer accounted for more than 10% of total revenue. In fiscal 2019, one customer accounted for 10% of total revenue and no other customer accounted for 10% or more of total revenue. During fiscal 2019, we performed a large implementation project with a customer which included consulting services the customer needed to help perform activities their employees were responsible for. Without these services, the revenue from this customer would have been less than 10%.

Our products are sold to manufacturing companies that operate mainly in the following six industries: automotive, consumer products, food and beverage, high technology, industrial products and life sciences. Given the similarities between consumer products and food and beverage as well as between high technology and industrial products, we aggregate them for management review. The following table presents revenue by industry for fiscal 2020, 2019 and 2018:

| | Years Ended January 31, | | |
|----------------------------------------------|-------------------------|------|------|
| | 2020 | 2019 | 2018 |
| Automotive..... | 36% | 39% | 37% |
| Consumer products and food and beverage..... | 15% | 16% | 16% |
| High technology and industrial products..... | 34% | 31% | 33% |
| Life sciences and other..... | 15% | 14% | 14% |
| Total revenue..... | 100% | 100% | 100% |

The decrease in percentage of revenue by industry for automotive in fiscal 2020 compared to fiscal 2019 was primarily related to a reduction in professional services revenue following the completion of a large, multisite global implementation project for a customer in the automotive industry that was substantially completed at the end of the fourth quarter of fiscal 2019.

On a constant currency basis, total revenue was \$333.0 million for fiscal 2019, representing a \$27.5 million, or 9%, increase from \$305.5 million for fiscal 2018. When comparing categories within total revenue at constant rates, our results for fiscal 2019 included increases in subscription and professional services revenue partially offset by a decrease in license and maintenance revenue. Revenue outside the North America region as a percentage of total revenue was 52% and 54% for fiscal 2019 and 2018, respectively. On a constant currency basis, total revenue increased across all regions during fiscal 2019 when compared to fiscal 2018.

Subscription Revenue. Subscription revenue consists of recurring fees from customers to access our products via the cloud and other subscription offerings. Our cloud offerings typically include access to QAD software, hosting, application support, maintenance support and product updates, if and when available. Included in subscription revenue are one-time set up fees for technical services such as configuration of the database and access to the environment.

On a constant currency basis, subscription revenue was \$107.2 million for fiscal 2020, representing a \$16.5 million, or 18%, increase from \$90.7 million for fiscal 2019. Our subscription revenue represented 35% and 28% of our total revenue in fiscal 2020 and 2019, respectively. On a constant currency basis, subscription revenue increased across all regions during fiscal 2020 when compared to the prior year and annual bookings grew over 70% from the prior year. One of the metrics that management uses to monitor subscription performance is the number of new cloud deals that have been signed in the period. In fiscal 2020 we closed 99 new cloud deals, including 50 new cloud customers and 49 conversions from existing customers who previously purchased on-premises licenses. This compared to fiscal 2019 when we closed 67 new cloud deals, including 41 new cloud customers and 26 conversions from existing customers who previously purchased on-premises licenses. Subscription billings grew 23% in fiscal 2020 from the prior year and subscription backlog as of January 31, 2020 was \$150.4 million, a 31% increase from \$114.7 million as of January 31, 2019. The increase in subscription revenue consists of new customer sites; existing customers converting from on-premises; and additional users and modules purchased by our existing cloud customers.

The following table presents subscription revenue by region for fiscal 2020, 2019 and 2018:

| | Years Ended January 31, | | |
|----------------------------------|-------------------------|------|------|
| | 2020 | 2019 | 2018 |
| North America..... | 56% | 56% | 54% |
| EMEA | 26% | 27% | 24% |
| Asia Pacific | 11% | 12% | 14% |
| Latin America..... | 7% | 5% | 8% |
| Total subscription revenue | 100% | 100% | 100% |

The following table presents subscription revenue by industry for fiscal 2020, 2019 and 2018:

| | Years Ended January 31, | | |
|----------------------------------------------|-------------------------|------|------|
| | 2020 | 2019 | 2018 |
| Automotive..... | 36% | 33% | 35% |
| Consumer products and food and beverage..... | 15% | 18% | 15% |
| High technology and industrial products..... | 26% | 24% | 23% |
| Life sciences and other | 23% | 25% | 27% |
| Total subscription revenue | 100% | 100% | 100% |

On a constant currency basis, subscription revenue was \$91.9 million for fiscal 2019, representing a \$22.4 million, or 32%, increase from \$69.5 million for fiscal 2018. On a constant currency basis, subscription revenue increased across all regions during fiscal 2019 when compared to the prior year. In fiscal 2019 we closed 67 new cloud deals, including 41 new cloud customers and 26 conversions from existing customers who previously purchased on-premises licenses. This compared to fiscal 2018 when we closed 65 new cloud deals, including 37 new cloud customers and 28 conversions from existing customers who previously purchased on-premises licenses.

We track our retention rate of subscription by calculating the annualized revenue of customer sites with contracts up for renewal at the beginning of the period compared to the annualized revenue associated with the customer sites that have canceled during the period. The percentage of revenue not canceled is our retention rate. Conversions to the cloud are not considered cancellations for purposes of this calculation. Our subscription customer retention rate is in excess of 90% in each of the fiscal years 2020, 2019 and 2018. We also track net dollar retention rate for our subscription revenue, which we calculate by comparing the revenue of our existing customers from a year ago to revenue of the same customers in the current year. Net dollar retention rate of our subscription revenue was 108% for fiscal 2020. The purpose of this metric is to calculate the additional subscription revenue generated from existing customers paying for additional users, functionality and price increases.

License Revenue. License revenue is derived from software license fees that customers pay for our core product, QAD Adaptive ERP, and any add-on modules they purchase. Our revenue mix has continued to shift from license to subscription revenue as a result of our business model transition. More new customers subscribe to our cloud-based offerings rather than purchasing traditional on-premises licenses. While we expect license revenue to decline over time, we do continue to experience quarterly fluctuations. We expect license revenue in fiscal 2021 will be negatively impacted by the COVID-19 pandemic.

On a constant currency basis, license revenue was \$16.6 million for fiscal 2020, representing an \$8.4 million, or 34%, decrease from \$25.0 million for fiscal 2019. On a constant currency basis, license revenue decreased across all regions during fiscal 2020 when compared to the prior year. During fiscal 2020, six customers placed license orders totaling more than \$0.3 million, one of which exceeded \$1.0 million. This compared to fiscal 2019 in which 14 customers placed license orders totaling more than \$0.3 million, two of which exceeded \$1.0 million. The majority of our license revenue is generated from our existing customers purchasing additional users and modules.

On a constant currency basis, license revenue was \$25.6 million for fiscal 2019, representing a \$0.3 million, or 1%, decrease from \$25.9 million for fiscal 2018. On a constant currency basis, license revenue decreased in our North America region and increased in our Latin America, Asia Pacific and EMEA regions during fiscal 2019 when compared to fiscal 2018. During fiscal 2019, 14 customers placed license orders totaling more than \$0.3 million, two of which exceeded \$1.0 million. This compared to fiscal 2018 in which 15 customers placed license orders totaling more than \$0.3 million, two of which exceeded \$1.0 million.

Maintenance Revenue. We offer our on-premises customers maintenance which includes support services 24 hours a day, seven days a week in addition to providing software upgrades, which include additional or improved functionality, when and if available.

On a constant currency basis, maintenance revenue was \$117.9 million for fiscal 2020, representing a \$2.7 million, or 2%, decrease from \$120.6 million for fiscal 2019. On a constant currency basis, maintenance revenue decreased in our North America, EMEA, and Asia Pacific regions and increased in our Latin America region during fiscal 2020 when compared to the prior year. The decrease in maintenance revenue period over period was primarily due to continued conversions of existing customers' on-premises licenses to cloud subscription, in addition to our historical attrition rates. When customers convert to the cloud they no longer pay for maintenance as those support services are included as a component of the subscription offering. Though we continue to see renewal rates above 90%, conversions from on-premises to cloud have resulted in decreases in maintenance revenue and we expect this trend to continue in the future.

On a constant currency basis, maintenance revenue was \$122.9 million for fiscal 2019, representing a \$6.0 million, or 5%, decrease from \$128.9 million for fiscal 2018. On a constant currency basis, maintenance revenue decreased across all regions during fiscal 2019 when compared to the prior year.

We track our retention rate of maintenance by calculating the annualized revenue of customer sites with contracts up for renewal at the beginning of the period compared to the annualized revenue associated with the customer sites that have canceled during the period. The percentage of revenue not canceled is our retention rate. Over the last three years, our maintenance retention rate has remained in excess of 90%.

Professional Services Revenue. Our professional services business includes technical and application consulting in addition to training, implementations, migrations and upgrades related to our solutions. Although our professional services are optional, our customers use these services when planning, implementing or upgrading our solutions whether in the cloud or on-premises. Professional services revenue growth is contingent upon subscription and license revenue growth and customer upgrade cycles, which are influenced by the strength of general economic and business conditions. In the first quarter of fiscal 2021, we have seen services projects delay or elongate due to the COVID-19 pandemic. This has negatively impacted our services revenue and margins in the first quarter of fiscal 2021 and we expect it will negatively impact both services revenue and margins for the fiscal year.

On a constant currency basis, professional services revenue was \$69.1 million for fiscal 2020, representing a \$21.3 million, or 24%, decrease from \$90.4 million for fiscal 2019. On a constant currency basis, professional services revenue decreased across all regions during fiscal 2020 when compared to the prior year. The decrease primarily related to a reduction in professional services revenue following the completion of a large, multisite global implementation project.

On a constant currency basis, professional services revenue was \$92.7 million for fiscal 2019, representing an \$11.4 million, or 14%, increase from \$81.3 million for fiscal 2018. On a constant currency basis, professional services revenue increased in our North America, Latin America and EMEA regions and remained relatively flat in our Asia Pacific region during fiscal 2019 when compared to the prior year. The increase in professional services revenue period over period can be attributed to personnel augmentation services we performed for one of our cloud customers, mainly through third-party contractors at low margins. For fiscal 2019, personnel augmentation services revenue was \$7.3 million, compared to \$1.1 million for fiscal 2018. Augmentation services consists of providing our employees or third-party contractors to assist the customer with the implementation tasks the customer needs to perform by supplementing their workforce. In addition, fiscal 2019 results reflected a higher amount of revenue per customer and a higher number of engagements compared to the prior year.

Total Cost of Revenue

| | Year Ended January 31, 2020 | Year Ended January 31, 2019 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|------|
| (in thousands) | | | | | \$ | % |
| Cost of revenue | | | | | | |
| Cost of subscription..... | \$ 38,451 | \$ 34,128 | \$ (4,455) | \$ 132 | \$ (4,323) | -13% |
| Cost of license | 2,308 | 2,714 | 399 | 7 | 406 | 15% |
| Cost of maintenance | 29,702 | 31,307 | 1,197 | 408 | 1,605 | 5% |
| Cost of professional services | 69,448 | 87,735 | 16,379 | 1,908 | 18,287 | 21% |
| Total cost of revenue | <u>\$ 139,909</u> | <u>\$ 155,884</u> | <u>\$ 13,520</u> | <u>\$ 2,455</u> | <u>\$ 15,975</u> | 10% |
| Percentage of revenue | 45% | 47% | | | | |

| | Year Ended January 31, 2019 | Year Ended January 31, 2018 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-------------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|------|
| (in thousands) | | | | | \$ | % |
| Cost of revenue | | | | | | |
| Cost of subscription..... | \$ 34,128 | \$ 30,563 | \$ (3,594) | \$ 29 | \$ (3,565) | -12% |
| Cost of license | 2,714 | 2,946 | 230 | 2 | 232 | 8% |
| Cost of maintenance | 31,307 | 31,246 | (173) | 112 | (61) | 0% |
| Cost of professional services | 87,735 | 84,670 | (3,280) | 215 | (3,065) | -4% |
| Total cost of revenue | <u>\$ 155,884</u> | <u>\$ 149,425</u> | <u>\$ (6,817)</u> | <u>\$ 358</u> | <u>\$ (6,459)</u> | -4% |
| Percentage of revenue | 47% | 49% | | | | |

Total cost of revenue consists of cost of subscription, cost of license, cost of maintenance and cost of professional services. Cost of subscription includes salaries, benefits, bonuses and other personnel expenses of our cloud operations employees, stock-based compensation for those employees, hosting and hardware costs, third-party contractor expense, royalties, professional fees, travel expense, and an allocation of information technology and facilities costs. Cost of license includes license royalties and amortization of capitalized software costs. Cost of maintenance includes salaries, benefits, bonuses and other personnel expenses of our support group, stock-based compensation for those employees, travel expense, royalties, professional fees and an allocation of information technology and facilities costs. Cost of professional services includes salaries, benefits, bonuses and other personnel expenses of our services employees, stock-based compensation for those employees, third-party contractor expense, travel expense and an allocation of information technology and facilities costs.

Total Cost of Revenue. On a constant currency basis, total cost of revenue was \$139.9 million and \$153.4 million for fiscal 2020 and 2019, respectively and as a percentage of total revenue was 45% for fiscal 2020 and 47% for fiscal 2019. The decrease in total cost of revenue as a percentage of total revenue was mainly due to the shift of our revenue mix from professional services to subscription. The non-currency related decrease in cost of revenue of \$13.5 million, or 9%, in fiscal 2020 compared to fiscal 2019 was primarily due to lower professional services third-party contractor costs, lower travel costs and lower salaries and related costs resulting from a decrease in headcount of 116 people associated with decreased professional services revenue, partially offset by higher hosting costs and salaries and related costs associated with the increase in subscription revenue.

On a constant currency basis, total cost of revenue was \$155.9 million and \$149.1 million for fiscal 2019 and 2018, respectively and as a percentage of total revenue was 47% for fiscal 2019 and 49% for fiscal 2018. The decrease in total cost of revenue as a percentage of total revenue was due to improved subscription and professional services margins. The non-currency related increase in cost of revenue of \$6.8 million, or 5%, in fiscal 2019 compared to fiscal 2018 was primarily due to higher hosting and personnel costs associated with the increase in subscription revenue and higher third-party contractor, travel and personnel costs associated with increased professional services revenue.

Cost of Subscription. On a constant currency basis, cost of subscription was \$38.5 million for fiscal 2020, representing a \$4.5 million, or 13%, increase from \$34.0 million for fiscal 2019. The non-currency related increase in cost of subscription of \$4.5 million in fiscal 2020 compared to fiscal 2019 was primarily due to higher hosting costs of \$2.3 million, higher salaries and related costs of \$1.0 million as a result of higher headcount of 19 people, higher cross-charges from professional services to support conversion and upgrade projects of \$0.4 million and higher information technology and facilities allocated costs of \$0.4 million. Cost of subscription as a percentage of subscription revenue was 36% and 37% in fiscal 2020 and 2019, respectively. We have continued to improve our subscription margins over time due to leveraging of ongoing economies of scale and implementing operational efficiencies. We have experienced and may experience in the future quarterly fluctuations

in our subscription margins as we make investments in our data centers and cloud operations to support future growth. Our strategic investments in cloud growth may not match the timing of revenue increases.

On a constant currency basis, cost of subscription was \$34.1 million for fiscal 2019, representing a \$3.6 million, or 12%, increase from \$30.5 million for fiscal 2018. The non-currency related increase in cost of subscription of \$3.6 million in fiscal 2019 compared to fiscal 2018 was primarily due to higher hosting costs of \$3.1 million, and higher salaries and related costs of \$0.6 million as a result of higher headcount of approximately 30 people. Cost of subscription as a percentage of subscription revenue was 37% and 44% in fiscal 2019 and 2018, respectively.

Cost of License. On a constant currency basis, cost of license was \$2.3 million for fiscal 2020, representing a \$0.4 million, or 15%, decrease from \$2.7 million for fiscal 2019. Cost of license consisted primarily of royalty expense, which as a percent of license revenue, remained relatively consistent year over year.

On a constant currency basis, cost of license was \$2.7 million for fiscal 2019, representing a \$0.2 million, or 7%, decrease from \$2.9 million for fiscal 2018. A majority of cost of license was royalty expense, which as a percent of license revenue, remained relatively consistent year over year.

Cost of Maintenance. On a constant currency basis, cost of maintenance was \$29.7 million for fiscal 2020, representing a \$1.2 million, or 4%, decrease from \$30.9 million for fiscal 2019. The non-currency related increase in cost of maintenance of \$1.2 million in fiscal 2020 compared to fiscal 2019 was primarily due to lower royalties of \$0.4 million and lower salaries and related costs of \$0.4 million. Cost of maintenance as a percentage of maintenance revenue was 25% in both fiscal 2020 and 2019.

On a constant currency basis, cost of maintenance was \$31.3 million for fiscal 2019, representing a \$0.2 million, or 1%, increase from \$31.1 million for fiscal 2018. The non-currency related increase in cost of maintenance of \$0.2 million in fiscal 2019 compared to fiscal 2018 was primarily due to personnel costs. Cost of maintenance as a percentage of maintenance revenue was 25% and 24% in fiscal 2019 and 2018, respectively.

Cost of Professional Services. On a constant currency basis, cost of professional services was \$69.4 million for fiscal 2020, representing a \$16.4 million, or 19%, decrease from \$85.8 million for fiscal 2019. The non-currency related decrease in cost of professional services of \$16.4 million was primarily due to lower third-party contractor costs of \$7.6 million, lower travel of \$3.8 million, lower salaries and related costs of \$2.5 million as a result of a decrease in headcount of approximately 116 people, lower cross-charges from other departments to support conversion and upgrade projects of \$1.7 million, lower bonuses of \$1.2 million and lower information technology and facilities allocated costs of \$0.3 million. These lower costs were partially offset by higher severance of \$0.7 million and higher stock compensation of \$0.2 million. Cost of professional services as a percentage of professional services revenue was 100% for fiscal 2020 and 95% for fiscal 2019.

On a constant currency basis, cost of professional services was \$87.7 million for fiscal 2019, representing a \$3.2 million, or 4%, increase from \$84.5 million for fiscal 2018. The non-currency related increase in cost of professional services of \$3.2 million was primarily due to higher third-party contractor costs of \$1.6 million, higher travel of \$1.3 million and higher salaries and related costs of \$1.1 million partially offset by lower bonuses of \$0.5 million and lower severance of \$0.3 million. The increase in salaries and related costs was the result of the addition of 40 services people hired in relation to the acquisition of our Indonesian distributor's assets, partially offset by a reduction of 20 people in our existing business. Cost of professional services as a percentage of professional services revenue was 95% for fiscal 2019 and 104% for fiscal 2018.

Sales and Marketing

| | Year Ended January 31, 2020 | Year Ended January 31, 2019 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|-----|
| (in thousands) | | | | | \$ | % |
| Sales and marketing | \$ 82,115 | \$ 78,207 | \$ (5,041) | \$ 1,133 | \$ (3,908) | -5% |
| Percentage of revenue | 26% | 23% | | | | |

| | Year Ended January 31, 2019 | Year Ended January 31, 2018 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|-----|
| (in thousands) | | | | | \$ | % |
| Sales and marketing | \$ 78,207 | \$ 75,368 | \$ (2,709) | \$ (130) | \$ (2,839) | -4% |
| Percentage of revenue | 23% | 25% | | | | |

Sales and marketing expense includes salaries, benefits, commissions, bonuses, stock-based compensation, travel expense and other personnel costs of our sales and marketing employees in addition to costs of programs aimed at increasing revenue, such as trade shows, user group events, lead generation, advertising and various sales and promotional programs. Sales and marketing expense also includes sales agent fees and an allocation of information technology and facilities costs.

On a constant currency basis, sales and marketing expense was \$82.1 million for fiscal 2020, representing a \$5.0 million, or 6%, increase from \$77.1 million for fiscal 2019. The non-currency related increase in sales and marketing expense of \$5.0 million in fiscal 2020 compared to fiscal 2019 was primarily due to higher salaries and related costs of \$1.9 million as a result of higher headcount of approximately 16 people, higher severance of \$1.5 million, higher sales agent fees of \$1.0 million, higher information technology and facilities allocated costs of \$0.7 million, higher costs of personnel from other departments performing demonstrations of \$0.6 million, higher recruiting fees of \$0.6 million and higher bonuses of \$0.3 million. These higher expenses were offset by lower commission expense of \$2.0 million. Sales and marketing expenses benefitted \$2.9 million from moving 30 order processing employees to general and administrative expense.

On a constant currency basis, sales and marketing expense was \$78.2 million for fiscal 2019, representing a \$2.7 million, or 4%, increase from \$75.5 million for fiscal 2018. The non-currency related increase in sales and marketing expense of \$2.7 million in fiscal 2019 compared to fiscal 2018 was primarily due to higher salaries and related costs of \$3.4 million as a result of higher headcount of approximately 30 people, higher stock compensation of \$0.8 million, higher severance of \$0.6 million, higher information technology and facilities allocated costs of \$0.4 million and higher travel of \$0.3 million. These higher expenses were offset by lower commissions of \$4.5 million, which is partly attributable to the capitalization of commission expense in fiscal 2019 as a result of the adoption of the new revenue standard, Topic 606. Commissions in fiscal 2018 were driven by stronger than anticipated new cloud business bookings in the fourth quarter and were expensed as incurred in fiscal 2018 whereas in fiscal 2019 commission expense related to new subscription and maintenance was capitalized and will be amortized over five years.

Research and Development

| | Year Ended January 31, 2020 | Year Ended January 31, 2019 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|-----|
| (in thousands) | | | | | \$ | % |
| Research and development... | \$ 54,726 | \$ 53,993 | \$ (1,665) | \$ 932 | \$ (733) | -1% |
| Percentage of revenue | 18% | 16% | | | | |

| | Year Ended January 31, 2019 | Year Ended January 31, 2018 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-------------------------------------------|-----------------------------|------|
| (in thousands) | | | | | \$ | % |
| Research and development... | \$ 53,993 | \$ 47,661 | \$ (6,265) | \$ (67) | \$ (6,332) | -13% |
| Percentage of revenue | 16% | 16% | | | | |

Research and development is expensed as incurred and consists primarily of salaries, benefits, bonuses, stock-based compensation, travel expense and other personnel costs for research and development employees in addition to professional services, such as fees paid to software development firms and independent contractors. Research and development expense includes an allocation of information technology and facilities costs, and is reduced by capitalized localization and translation costs.

On a constant currency basis, research and development expense was \$54.7 million for fiscal 2020, representing a \$1.6 million, or 3%, increase from \$53.1 million for fiscal 2019. The non-currency related increase in research and development expense of \$1.6 million in fiscal 2020 compared to fiscal 2019 was primarily due to higher salaries and related costs of \$0.9 million as a result of higher headcount of approximately 16 people, higher cross-charges from other departments of \$0.6 million and higher information technology and facilities allocated costs of \$0.4 million. These higher costs support the development of advanced technologies in the areas of robotic process automation, machine learning and the industrial Internet of Things.

On a constant currency basis, research and development expense was \$54.0 million for fiscal 2019, representing a \$6.3 million, or 13%, increase from \$47.7 million for fiscal 2018. The non-currency related increase in research and development expense of \$6.3 million in fiscal 2019 compared to fiscal 2018 was primarily due to higher personnel costs of \$2.7 million, due in part to higher headcount of approximately 12 people, higher contractor costs of \$2.1 million, higher information technology and facilities allocated costs of \$0.4 million and higher stock compensation of \$0.4 million. These costs were a result of our investment in our Channel Islands project, which included the development of a new platform and user interface.

General and Administrative

| | Year Ended January 31, 2020 | Year Ended January 31, 2019 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|----------------------------------------------------|-------------------------------------|----------|
| (in thousands) | | | | | \$ | % |
| General and Administrative.. | \$ 39,442 | \$ 35,248 | \$ (4,541) | \$ 347 | \$ (4,194) | -12% |
| Percentage of revenue | 13% | 11% | | | | |

| | Year Ended January 31, 2019 | Year Ended January 31, 2018 | Change in Constant Currency | Change due to Currency Fluctuations | Total Change as Reported | |
|------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|----------------------------------------------------|-------------------------------------|----------|
| (in thousands) | | | | | \$ | % |
| General and Administrative.. | \$ 35,248 | \$ 35,222 | \$ 121 | \$ (147) | \$ (26) | 0% |
| Percentage of revenue | 11% | 11% | | | | |

General and administrative expense includes salaries, benefits, bonuses, stock-based compensation, travel expense and other personnel costs related to our finance, human resources, legal and executive personnel. General and administrative expense also includes personnel costs of order processing, professional fees for accounting and legal services, bad debt expense and an allocation of information technology and facilities costs.

On a constant currency basis, general and administrative expense was \$39.4 million for fiscal 2020, representing a \$4.5 million, or 13%, increase from \$34.9 million for fiscal 2019. The non-currency related increase in general and administrative expense of \$4.5 million in fiscal 2020 compared to fiscal 2019 was primarily due to higher personnel and other costs of \$2.9 million, as a result of moving our order processing employees from sales and marketing expense to general and administrative expense, higher salaries and related costs of \$0.9 million, higher stock compensation of \$0.8 million and higher information technology and facilities allocated costs of \$0.4 million. These higher costs were partially offset by lower accounting fees of \$0.4 million.

On a constant currency basis, general and administrative expense was \$35.2 million for fiscal 2019, representing a \$0.2 million, or 1%, decrease from \$35.4 million for fiscal 2018. The non-currency related decrease in general and administrative expense of \$0.2 million in fiscal 2019 compared to fiscal 2018 was primarily due to lower bonuses of \$0.8 million and lower stock compensation of \$0.4 million partially offset by higher accounting fees of \$0.4 million and higher payroll taxes of \$0.2 million.

Amortization of Intangibles from Acquisitions

Amortization of intangibles from acquisitions totaled \$0.3 million, \$0.1 million and \$0.4 million for fiscal 2020, 2019 and 2018, respectively. Amortization expense for fiscal 2020 and 2019 was due to intangible assets acquired during fiscal 2019. Amortization expense for fiscal 2018 was due to intangible assets acquired from our fiscal 2013 acquisitions of DynaSys and CEBOS.

Total Other (Income) Expense

| (in thousands) | Year Ended January 31, 2020 | Increase (Decrease) Compared to Prior Period | | Year Ended January 31, 2019 | Increase (Decrease) Compared to Prior Period | | Year Ended January 31, 2018 |
|--------------------------------------------|-----------------------------------|-------------------------------------------------------|-------|-----------------------------------|-------------------------------------------------------|-------|-----------------------------------|
| | | \$ | % | | \$ | % | |
| Other (income) expense.... | | | | | | | |
| Interest income | \$ (2,782) | \$ 182 | 7% | \$ (2,600) | \$ (1,053) | -68% | \$ (1,547) |
| Interest expense | 630 | 13 | 2% | 643 | (26) | -4% | 669 |
| Other expense (income), net | 68 | (455) | -118% | (387) | (2,399) | -119% | 2,012 |
| Total other (income) expense, net | <u>\$ (2,084)</u> | <u>\$ (260)</u> | -11% | <u>\$ (2,344)</u> | <u>\$ (3,478)</u> | -307% | <u>\$ 1,134</u> |
| Percentage of revenue | 1% | | | 1% | | | 0% |

Total other (income) expense, net was \$(2.1) million, \$(2.3) million and \$1.1 million for fiscal 2020, 2019 and 2018, respectively. When comparing fiscal 2020 to fiscal 2019, the unfavorable change is primarily related to a decrease in the fair value of our interest rate swap of \$0.3 million and lower foreign exchange gains of \$0.2 million partially offset by higher interest income of \$0.2 million. When comparing fiscal 2019 to fiscal 2018, the favorable change is primarily related to higher foreign exchange gains of \$2.7 million, as the U.S. dollar strengthened by approximately 10% against the euro, and higher interest income of \$1.1 million due to interest rate increases.

Interest rate swap valuations and foreign exchange gains and losses are subject to changes which are inherently unpredictable. Our interest rate swap is accounted for using mark-to-market accounting. Accordingly, changes in the fair value of the swap each reporting period are adjusted through earnings, subjecting us to non-cash volatility in our results of operations. The swap fixes the interest rate on our mortgage to 4.31% over the entire term of the mortgage. Although the agreement allows us to prepay the loan and exit the agreement early, we have no intention of doing so. As a result, we will have non-cash adjustments through earnings each reporting period. Over the term of the mortgage, however, the net impact of these mark-to-market adjustments on earnings will be zero.

Income Tax Expense

| (in thousands) | Year Ended January 31, 2020 | Increase (Decrease) Compared to Prior Period | | Year Ended January 31, 2019 | Increase (Decrease) Compared to Prior Period | | Year Ended January 31, 2018 |
|-----------------------------|-----------------------------------|-------------------------------------------------------|------|-----------------------------------|-------------------------------------------------------|------|-----------------------------------|
| | | \$ | % | | \$ | % | |
| Income tax expense | \$ 12,345 | \$ 10,856 | 729% | \$ 1,489 | \$ (3,368) | -69% | \$ 4,857 |
| Percentage of revenue | 4% | | | 1% | | | 2% |
| Effective tax rate | -343% | | | 12% | | | -115% |

We recorded income tax expense of \$12.3 million, \$1.5 million and \$4.9 million for fiscal 2020, 2019, and 2018 respectively. QAD's effective tax rate was -343%, 12%, and -115% for fiscal 2020, 2019, and 2018, respectively. We incurred a pre-tax loss of (\$3.6) million in fiscal 2020 versus a pre-tax income of \$11.9 million in fiscal 2019. The change in effective tax rate in fiscal 2020 was primarily due to a \$16.2 million increase in valuation allowance. This increase is mainly comprised of a \$10.3 million valuation allowance placed on the net deferred tax assets of the Company's wholly-owned Irish subsidiary (the "Irish principal") and a \$5.2 million valuation allowance on our U. S. equity compensation.

We generated pre-tax income of \$11.9 million in fiscal 2019 compared to a pre-tax loss of \$(4.2) million in fiscal 2018. Income tax expense in fiscal 2018 included a \$2.0 million provision to estimate the one-time mandatory repatriation tax expense from the Tax Act. The one-time mandatory repatriation tax was further refined during fiscal 2019 and the final tax expense was \$0.7 million. As a result, a tax benefit of \$1.3 million was recorded in fiscal 2019. Tax expense was further reduced in fiscal 2019 by equity compensation deductions overseas. In fiscal 2018, tax expense was significantly impacted by the provisional effects of the one-time mandatory repatriation and equity compensation deductions.

Our effective tax rate is affected by the relative amount of our foreign earnings. Our foreign earnings are primarily generated from China, India and Mexico. These countries have higher statutory and effective tax rates than the U.S. We are not able to realize related benefits from operating in Ireland due to a valuation allowance placed against our Irish principal.

On March 27, 2020, the U.S. government enacted the “Coronavirus Aid, Relief and Economic Security Act” (CARES Act). The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. We continue to examine the impacts the CARES Act may have on our business.

For further information regarding income taxes, see Note 4 “Income Taxes” within the Notes to Consolidated Financial Statements included in Item 15 of this Annual Report on Form 10-K.

Non-GAAP Financial Measures

Regulation S-K Item 10(e), “Use of Non-GAAP Financial Measures in Commission Filings,” defines and prescribes the conditions for use of non-GAAP financial information. Our measures of non-GAAP adjusted EBITDA, non-GAAP adjusted EBITDA margins, non-GAAP pre-tax income and estimated cash taxes on GAAP earnings each meet the definition of a non-GAAP financial measure. We define the non-GAAP measures as follows:

- Non-GAAP adjusted EBITDA - EBITDA is GAAP net income before net interest expense, income tax expense, depreciation and amortization. Non-GAAP adjusted EBITDA is EBITDA less stock-based compensation expense and the change in the fair value of our interest rate swap.
- Non-GAAP adjusted EBITDA margins - Calculated by dividing non-GAAP adjusted EBITDA by total revenue.
- Non-GAAP pre-tax income - GAAP income before income taxes not including the effects of stock-based compensation expense, amortization of purchased intangible assets and the change in fair value of our interest rate swap.

QAD’s management uses non-GAAP measures internally to evaluate the business and believes that presenting non-GAAP measures provides useful information to investors regarding the underlying business trends and performance of our ongoing operations as well as useful metrics for monitoring our performance and evaluating it against industry peers. The non-GAAP financial measures presented should be used in addition to, and in conjunction with, results presented in accordance with GAAP, and should not be relied upon to the exclusion of GAAP financial measures. Management strongly encourages investors to review our consolidated financial statements in their entirety and not to rely on any single financial measure in evaluating the company.

QAD non-GAAP measures reflect adjustments based on the following items:

Stock-based compensation expense: We have excluded the effect of stock-based compensation expense from our non-GAAP adjusted EBITDA and non-GAAP pre-tax income calculations. Although stock-based compensation expense is calculated in accordance with current GAAP and constitutes an ongoing and recurring expense, such expense is excluded from non-GAAP results because it is not an expense which generally requires cash settlement by QAD, and therefore is not used by us to assess the profitability of our operations. We also believe the exclusion of stock-based compensation expense provides a more useful comparison of our operating results to the operating results of our peers.

Amortization of purchased intangible assets: We amortize purchased intangible assets in connection with our acquisitions. We have excluded the effect of amortization of purchased intangible assets, which include purchased technology, customer relationships, trade names and other intangible assets, from our non-GAAP pre-tax income calculation, because doing so makes internal comparisons to our historical operating results more consistent. In addition, we believe excluding amortization of purchased intangible assets provides a more useful comparison of our operating results to the operating results of our peers.

Change in fair value of the interest rate swap: We entered into an interest rate swap to mitigate our exposure to the variability of one-month LIBOR for our floating rate debt related to the mortgage of our headquarters. We have excluded the gain/loss adjustments to record the interest rate swap at fair value from our non-GAAP adjusted EBITDA and non-GAAP pre-tax income calculations. We believe that these fluctuations are not indicative of our operational costs or meaningful in evaluating comparative period results because we currently have no intention of exiting the debt agreement early; and therefore over the life of the debt the sum of the fair value adjustments will be zero.

The following table sets forth the reconciliation of the non-GAAP financial measures of adjusted EBITDA, adjusted EBITDA margins and non-GAAP pre-tax income to the most comparable GAAP measures for fiscal years 2020, 2019, and 2018 (in thousands):

| | Years Ended January 31, | | |
|--------------------------------------------------|-------------------------|------------|------------|
| | 2020 | 2019 | 2018 |
| Total revenue..... | \$ 310,772 | \$ 333,016 | \$ 305,018 |
| Net (loss) income | (15,949) | 10,428 | (9,065) |
| Add back: | | | |
| Net interest (income) expense..... | (2,152) | (1,957) | (878) |
| Depreciation..... | 5,198 | 4,734 | 4,562 |
| Amortization | 1,316 | 772 | 1,199 |
| Income tax expense..... | 12,345 | 1,489 | 4,857 |
| EBITDA | \$ 758 | \$ 15,466 | \$ 675 |
| Add back: | | | |
| Stock based compensation expense..... | 11,354 | 10,122 | 8,924 |
| Change in fair value of interest rate swap | 368 | 51 | (377) |
| Adjusted EBITDA..... | \$ 12,480 | \$ 25,639 | \$ 9,222 |
| Adjusted EBITDA margin..... | 4% | 8% | 3% |
| Non-GAAP pre-tax income reconciliation | | | |
| (Loss) income before income tax expense | \$ (3,604) | \$ 11,917 | \$ (4,208) |
| Add back | | | |
| Stock-based compensation expense | 11,354 | 10,122 | 8,924 |
| Amortization of purchased intangible assets..... | 295 | 125 | 842 |
| Change in fair value of interest rate swap | 368 | 51 | (377) |
| Non-GAAP income before income taxes | \$ 8,413 | \$ 22,215 | \$ 5,181 |

LIQUIDITY AND CAPITAL RESOURCES

Our primary source of cash is from the sale of subscriptions, licenses, maintenance and professional services to our customers. Our primary use of cash is payment of our operating expenses which mainly consist of employee-related expenses, such as compensation and benefits, as well as general operating expenses for facilities, third-party hosting providers, third party contractors and other overhead costs. In addition to operating expenses, we may also use cash for capital expenditures; payment of dividends, payment of our mortgage, withholding taxes on the settlement of stock-based compensation and stock repurchases; and to invest in our growth initiatives, which may include acquisitions of products, technologies and businesses.

At January 31, 2020, our principal sources of liquidity were cash and equivalents totaling \$136.7 million and net accounts receivable of \$81.0 million. Our cash and equivalents consisted of current bank accounts, registered money market funds and time delineated deposits. Approximately 81% of our cash and equivalents were held in U.S. dollar denominated accounts as of January 31, 2020.

Our primary commercial banking relationship is with Bank of America and its global affiliates. Our largest cash concentrations are in the United States and Ireland. The percentage of cash and equivalents held outside of the United States was 69% and 74% as of January 31, 2020 and January 31, 2019, respectively. The majority of our cash and equivalents are held in investment accounts which are predominantly placed in money market mutual funds, U.S. Treasury and government securities funds. The remaining cash and equivalents are held in deposit accounts and certificates of deposit.

We are a U.S.-based multinational company subject to tax in multiple U.S. and foreign tax jurisdictions. In addition to providing for U.S. income taxes on earnings from the United States, we provide for U.S. income taxes on the earnings of foreign subsidiaries unless the subsidiaries' earnings are considered permanently reinvested outside the United States. We consider the earnings of our foreign subsidiaries as permanently reinvested. We do not anticipate changing our intention regarding permanently reinvested earnings as of the balance sheet date.

In December 2017, the United States signed into law the Tax Cuts and Job Act, (the Tax Act). The Tax Act includes a mandatory one-time tax on accumulated earnings of our foreign subsidiaries which resulted in \$0.7 million of additional U.S.

tax and is being paid in equal installments over eight years beginning in fiscal 2019. In spite of the U.S. taxation on these earnings, we intend to permanently reinvest the earnings in our foreign subsidiaries. Should we decide to repatriate these earnings in the future, we would not expect to incur significant additional taxes; however, foreign withholding taxes, currency translation, state taxes and currency control laws must always be considered.

The following table summarizes our cash flows for the fiscal years ended January 31, 2020, 2019 and 2018, respectively.

| (in thousands) | Years Ended January 31, | | |
|----------------------------------------------------------------|-------------------------|-------------------|-----------------|
| | 2020 | 2019 | 2018 |
| Net cash provided by operating activities..... | \$ 16,997 | \$ 19,007 | \$ 10,418 |
| Net cash used in investing activities..... | (5,712) | (9,258) | (4,669) |
| Net cash used in financing activities | (12,275) | (14,691) | (9,165) |
| Effect of foreign exchange rates on cash and equivalents | (1,706) | (2,668) | 5,357 |
| Net (decrease) increase in cash and equivalents..... | <u>\$ (2,696)</u> | <u>\$ (7,610)</u> | <u>\$ 1,941</u> |

Typical factors affecting our cash provided by operating activities include our level of revenue and earnings for the period; the timing and amount of employee related compensation payments, vendor payments and tax payments; and the timing and amount of billings and cash collections from our customers, which is our largest source of operating cash flow. Net cash flows provided by operating activities were \$17.0 million and \$19.0 million for fiscal 2020 and 2019, respectively. The decrease in cash flows from operating activities was due primarily to lower net income of \$26.4 million partially offset by the positive cash flow effect of changes in non-cash items (including net change in valuation allowance, depreciation and amortization, stock-based compensation, change in fair value of interest rate swap and provision of doubtful/sales adjustments) of \$18.7 million.

Net cash flows provided by operating activities were \$19.0 million and \$10.4 million for fiscal 2019 and 2018, respectively. The increase in cash flows from operating activities was due primarily to an increase in net income of \$19.5 million and the positive cash flow effect of changes in accounts receivable of \$11.0 million partially offset by the negative cash flow effect of changes in accounts payable and other liabilities of \$(17.4) million.

Net cash used in investing activities consisted primarily of capital expenditures of \$5.7 million, \$4.3 million and \$3.7 million for fiscal 2020, 2019 and 2018, respectively. We continue to monitor our capital spending and do not believe we are delaying critical capital expenditures required to run our business. During fiscal 2019, we made two acquisitions. We acquired the assets of one of our Indonesian software distributors and made another acquisition to add functionality to our product suite. The total purchase price of the two acquisitions was \$2.7 million and funded entirely with cash on hand.

Net cash used in financing activities consisted primarily of payments of withholding taxes on settlement of stock-based compensation and payment of dividends. We paid withholding taxes of \$6.1 million, \$8.7 million and \$3.4 million in fiscal 2020, 2019 and 2018, respectively, on vested restricted stock units and exercised stock appreciation rights. We made dividend payments of \$5.6 million, \$5.5 million and \$5.4 million in fiscal 2020, 2019 and 2018, respectively. On a regular basis the Board of Directors evaluates our ability to continue to pay dividends as well as the structure of any potential dividend payments.

We have historically calculated accounts receivable days' sales outstanding (DSO), using the countback, or last-in first-out, method. This method calculates the number of days of billed revenue represented by the accounts receivable balance as of period end. When reviewing the performance of our entities, DSO under the countback method is used by management. It is management's belief that the countback method best reflects the relative health of our accounts receivable as of a given quarter-end or year-end because of the cyclical nature of our billings. Our billing cycle includes high annual maintenance renewal billings at year-end that will not be recognized as earned revenue until future periods.

DSO under the countback method was relatively consistent at 45 days and 48 days as of January 31, 2020 and 2019, respectively. DSO using the average method, which is calculated utilizing the accounts receivable balance and earned revenue for the most recent quarter, was 93 days and 89 days as of January 31, 2020 and 2019, respectively. The aging of our accounts receivable as of January 31, 2020 remained consistent in comparison with the aging as of January 31, 2019. We believe our reserve methodology is adequate, our reserves are properly stated as of January 31, 2020 and the quality of our receivables remains good.

There have been no material changes in our contractual obligations or commercial commitments outside the ordinary course of business. Cash requirements for items other than normal operating expenses are anticipated for capital expenditures,

dividend payments and other equity transactions. We may require cash for acquisitions of new businesses, software products or technologies complementary to our business.

We are monitoring the impact of COVID-19 on our operating results and liquidity and believe the pandemic will negatively impact operating results and liquidity in fiscal 2021. In the first quarter of fiscal 2021 we have implemented cost savings measures in the areas of travel, personnel expense and discretionary spending. We will continue to monitor our costs and if needed, we will reduce costs further during fiscal 2021. Given we have \$136.7 million of cash and our only debt is the mortgage of our Corporate headquarters of \$12.9 million, we believe we are in a solid position to withstand the negative impacts to our operating income and liquidity in fiscal 2021. We believe that our cash on hand and net cash provided by operating activities will provide us with sufficient resources to meet our current and long-term working capital requirements, debt service, dividend payments and other cash needs for at least the next twelve months.

Our revenue, earnings, cash flows, receivables, and payables are subject to fluctuations due to changes in foreign currency exchange rates. See Part II, Item 7A, “Quantitative and Qualitative Disclosures about Market Risk” for further discussion.

Seasonal Nature of Deferred Revenue, Accounts Receivable and Operating Cash Flow. Deferred revenue primarily consists of billings to customers for maintenance and subscription. When renewing maintenance we generally invoice our customers in annual cycles and when renewing subscription we generally invoice our customers quarterly or annually. We typically issue renewal invoices in advance of the renewal period. The invoice for initial maintenance and subsequent invoices for maintenance renewal may occur in different quarters of the relevant year. This may result in quarterly fluctuations in deferred revenue and accounts receivable. There is a disproportionate weighting towards annual billings in the fourth quarter, primarily as a result of large enterprise account buying patterns. Our fourth quarter has historically been our strongest quarter for new business and renewals. The year on year compounding effect of this seasonality in both billing patterns and overall new and renewal business causes the value of invoices that we generate in the fourth quarter for both new business and renewals to increase as a proportion of our total annual billings.

The sequential quarterly changes in accounts receivable, related deferred revenue and operating cash flow during the first three quarters of our fiscal year are not necessarily indicative of the billing activity that occurs in the fourth quarter as displayed below (in thousands):

| | January 31, 2020 | October 31, 2019 | July 31, 2019 | April 30, 2019 |
|--------------------------------|-----------------------------|-----------------------------|--------------------------|---------------------------|
| Fiscal 2020 | | | | |
| Accounts receivable, net..... | \$ 80,968 | \$ 39,748 | \$ 41,495 | \$ 49,019 |
| Deferred revenue, current..... | 118,413 | 81,893 | 94,399 | 104,471 |
| Operating cash flow (1)..... | 9,144 | (6,477) | 135 | 14,195 |
| | January 31, 2019 | October 31, 2018 | July 31, 2018 | April 30, 2018 |
| Fiscal 2019 | | | | |
| Accounts receivable, net..... | \$ 81,577 | \$ 46,420 | \$ 54,258 | \$ 56,909 |
| Deferred revenue, current..... | 115,253 | 80,537 | 91,195 | 103,369 |
| Operating cash flow (1)..... | 3,890 | 5,971 | 5,361 | 3,785 |
| | January 31, 2018 | October 31, 2017 | July 31, 2017 | April 30, 2017 |
| Fiscal 2018 | | | | |
| Accounts receivable, net..... | \$ 83,518 | \$ 50,753 | \$ 42,397 | \$ 46,381 |
| Deferred revenue, current..... | 116,693 | 83,117 | 89,661 | 97,235 |
| Operating cash flow (1)..... | 7,574 | (4,794) | (244) | 7,882 |

(1) Operating cash flow represents net cash provided by (used in) operating activities for the three months ended in the periods stated above.

CONTRACTUAL OBLIGATIONS

The following table summarizes our significant contractual obligations at January 31, 2020 and the effect these contractual obligations are expected to have on our liquidity and cash flows in future periods.

| | Years Ended January 31, | | | | | Thereafter | Total |
|---------------------------------------|-------------------------|----------------|----------------|---------------|---------------|---------------|----------------|
| | 2021 | 2022 | 2023 | 2024 | 2025 | | |
| | (In millions) | | | | | | |
| Notes payable | \$ 0.5 | \$ 0.5 | \$ 11.9 | \$ — | \$ — | \$ — | \$ 12.9 |
| Notes payable interest payments | 0.6 | 0.5 | 0.2 | — | — | — | 1.3 |
| Lease obligations | 5.2 | 4.0 | 3.2 | 2.6 | 2.2 | 5.5 | 22.7 |
| Purchase obligations | 11.9 | 5.4 | 0.8 | 0.1 | — | — | 18.2 |
| Total | <u>\$ 18.2</u> | <u>\$ 10.4</u> | <u>\$ 16.1</u> | <u>\$ 2.7</u> | <u>\$ 2.2</u> | <u>\$ 5.5</u> | <u>\$ 55.1</u> |

Purchase obligations are contractual obligations for the purchase of goods or services. They are defined as agreements that are enforceable and legally binding for QAD which specify all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the transaction. The amounts above exclude certain short-term contracts relating to normal recurring purchasing activity. With respect to purchase obligations that are cancelable by QAD, this table generally includes the amount that would have been payable if we had canceled the obligation as of January 31, 2020. Purchase obligations relate primarily to information technology infrastructure costs, hosting services agreements and costs associated with our sales and marketing events.

We have omitted unrecognized tax benefits from this table due to the inherent uncertainty regarding the timing of potential issue resolution. Specifically, either (a) the underlying positions have not been fully enough developed under audit to quantify at this time, or (b) the years relating to the issues for certain jurisdictions are not currently under audit. As of January 31, 2020, we had \$1.2 million of unrecognized tax benefits. This is before the netting required by ASU 2013-11 which requires unrecognized tax benefits offset deferred tax assets for a loss or credit that would apply in settlement of the uncertain tax position. For further information regarding the unrecognized tax benefits see Note 4 “Income Taxes” within Notes to Consolidated Financial Statements.

Purchase orders or contracts for the purchase of supplies and other goods and services are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. Our purchase orders are based on our current procurement or development needs and are fulfilled by our vendors within short time frames. We do not have significant agreements for the purchase of supplies or other goods specifying minimum quantities or set prices that exceed our expected requirements for three months.

We have certain royalty commitments associated with the licensing of certain products. Royalty expense is generally based on the number of licenses delivered or being used in the cloud environment; or a percentage of the underlying revenue. Royalty expense, included in cost of subscription, license and maintenance revenue, was \$18.3 million, \$18.6 million and \$17.1 million in fiscal 2020, 2019 and 2018, respectively.

Note Payable

Effective May 30, 2012, QAD Ortega Hill, LLC, a consolidated entity of QAD Inc., entered into a variable rate credit agreement (the “2012 Mortgage”) with Mechanics Bank (formerly Rabobank, N.A.), to refinance a pre-existing mortgage. The 2012 Mortgage has an original principal balance of \$16.1 million and bears interest at the one month LIBOR rate plus 2.25%. One month LIBOR was 1.67% at January 31, 2020. The 2012 Mortgage matures in June 2022 and is secured by the Company’s headquarters located in Santa Barbara, California. In conjunction with the 2012 Mortgage, QAD Ortega Hill, LLC entered into an interest rate swap with Mechanics Bank. The swap agreement has an initial notional amount of \$16.1 million and a schedule matching that of the underlying loan that synthetically fixes the interest rate on the debt at 4.31% for the entire term of the 2012 Mortgage. The terms of the 2012 Mortgage provide for QAD Ortega Hill, LLC to make net monthly payments of \$88,100 consisting of principal and interest and one final payment of \$11.7 million. The unpaid balance as of January 31, 2020 was \$12.9 million.

Lease Obligations

We lease certain office facilities, office equipment and automobiles under lease agreements. Although our office lease agreements end on various dates through fiscal year 2032, they typically include termination options at earlier dates. The

contractual obligations table reflects future minimum rental payments under non-cancellable operating lease commitments with terms of more than one year. For further discussion of our leased office facilities, see Item 2 entitled “Properties” included elsewhere in this Annual Report on Form 10-K. For further information regarding leases, see Note 9 “Leases” within the Notes to Consolidated Financial Statements included in Item 15 of this Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

As of January 31, 2020, we did not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of SEC Regulation S-K.

CRITICAL ACCOUNTING POLICIES

The SEC defines “critical accounting policies” as those that require application of management’s most difficult, subjective, or complex judgments. These policies often require us to make estimates about the effects of matters that are inherently uncertain and are subject to change in subsequent periods.

We consider the following policies to be critical because of the significance of these items to our operating results and the estimation processes and management judgment involved in each:

- Revenue
- Income taxes

Our senior management has reviewed these critical accounting policies and related disclosures. Historically, estimates described in our critical accounting policies that have required significant judgment and estimation on the part of management have been reasonably accurate.

Revenue. We offer our software using the same underlying technology via two models: a traditional on-premises licensing model and a cloud-based subscription model. The on-premises model involves the sale or license of software on a perpetual basis to customers who take possession of the software and install and maintain the software on their own hardware. Under the cloud-based subscription delivery model, we provide access to our software on a hosted basis as a service and customers generally do not have the contractual right to take possession of the software.

We generate revenue through sales of licenses and maintenance provided to our on-premises customers and through subscriptions of our cloud-based software. We offer professional services to both our on-premises and cloud customers to assist them with the design, testing and implementation of our software.

We determine revenue recognition 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; and
- Recognition of revenue when, or as, we satisfy a performance obligation.

Revenue is presented net of sales, value-added and other taxes collected from customers and remitted to government authorities.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account under Topic 606. The transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied by transferring the promised good or service to the customer. We identify and track the performance obligations at contract inception so that we can monitor and account for the performance obligations over the life of the contract.

Our contracts which contain multiple performance obligations generally consist of the initial purchase of subscription or licenses and a professional services engagement. License purchases generally have multiple performance obligations as customers purchase maintenance in addition to the licenses. Our single performance obligation arrangements are typically maintenance renewals, subscription renewals and services engagements.

For contracts with multiple performance obligations where the contracted price differs from the standalone selling price (SSP) for any distinct good or service, we may be required to allocate the contract's transaction price to each performance obligation using our best estimate for the SSP. SSP is assessed annually using a historical analysis of contracts with customers executed in the most recently completed fiscal year to determine the range of selling prices applicable to a distinct good or service.

Judgment is required to determine the SSP for each distinct performance obligation. We rarely license or sell our software products on a stand-alone basis, so we are required to estimate the range of SSPs for each performance obligation. In instances where SSP is not directly observable because we do not sell the license, product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. In making these judgments, we analyze various factors, including our pricing methodology and consistency, size of the arrangement, length of term, customer demographics and overall market and economic conditions. Based on these results, the estimated SSP is set for each distinct product or service delivered to customers. We rarely sell licenses on a stand-alone basis, as the majority of our license sales to customers include first year maintenance with the license purchase. We frequently sell subscription, maintenance and services on a stand-alone basis.

Subscription

Subscription revenue is recognized ratably over the initial subscription period committed to by the customer commencing when the cloud environment is made available to the customer. The initial subscription period is typically 24 to 60 months. We generally invoice our customers in advance on quarterly or annual basis and typical payment terms provide that customers make payment within 30 days of invoice.

Software Licenses

Transfer of control for software is considered to have occurred upon electronic delivery of the license key that provides immediate availability of the product to the customer. Our typical payment terms tend to vary by region but our standard payment terms are within 30-90 days of invoice.

Maintenance

Revenue from support services and product updates, referred to as maintenance revenue, is recognized ratably over the term of the maintenance period, which in most instances is one year. Software license updates provide customers with rights to unspecified software product updates, maintenance releases and patches released during the term of the support period on a when-and-if available basis. Product support includes Internet access to technical content, as well as Internet and telephone access to technical support personnel. Our customers purchase both product support and license updates when they acquire new software licenses. In addition, a majority of customers renew their support services contracts annually and typical payment terms provide that customers make payment within 30 days of invoice.

Professional Services

Revenue from professional services is typically comprised of implementation, development, training or other consulting services. Consulting services are generally sold on a time-and-materials or fixed fee basis and can include services ranging from software installation to data conversion and building non-complex interfaces to allow the software to operate in integrated environments. We recognize revenue for time-and-materials arrangements as the services are performed. In fixed fee arrangements, revenue is recognized as services are performed as measured by costs incurred to date, compared to total estimated costs to complete the services project. Management applies judgment when estimating project status and the costs necessary to complete the services projects. A number of internal and external factors can affect these estimates, including labor rates, utilization and efficiency variances and specification and testing requirement changes. Services are generally invoiced upon milestones in the contract or upon consumption of the hourly resources and payments are typically due 30 days after invoice.

Indirect Sales Channels

We execute arrangements through indirect sales channels via sales agents and distributors who are authorized to market our software products to end users. In arrangements with sales agents, QAD contracts directly with the customer and the sales agents are compensated on a commission basis. Distributor arrangements are those in which the resellers are authorized to market and distribute our software products to end users in specified territories and the distributor bears the risk of collection from the end user customer. We recognize revenue from transactions with distributors when the distributor submits a signed

agreement and transfer of control has occurred to the distributor, in accordance with the five revenue recognition steps noted above. Revenue from distributor transactions is recorded on a net basis (the amount actually received by us from the distributor). We do not offer rights of return, product rotation or price protection to any of our distributors. During the fiscal year ended January 31, 2020, our revenue from sales agents and distributors was less than 10% of total subscription, license and maintenance revenue.

Disaggregated Revenue

We disaggregate revenue from contracts with customers by geography and by the customers' industry within manufacturing, as we believe it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

Our revenue by geography is as follows:

| | Years Ended January 31, | | |
|--------------------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | | (in thousands) | |
| North America..... | \$ 151,097 | \$ 162,307 | \$ 141,614 |
| EMEA | 90,885 | 96,989 | 89,693 |
| Asia Pacific | 46,363 | 51,628 | 50,689 |
| Latin America..... | 22,427 | 22,092 | 23,022 |
| Total revenue..... | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ 305,018</u> |

Our revenue by industry is as follows:

| | Years Ended January 31, | | |
|----------------------------------------------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | | (in thousands) | |
| Automotive..... | \$ 110,900 | \$ 128,249 | \$ 113,579 |
| Consumer products and food and beverage..... | 46,915 | 53,637 | 47,273 |
| High technology and industrial products..... | 106,807 | 106,658 | 99,990 |
| Life sciences and other..... | 46,150 | 44,472 | 44,176 |
| Total revenue..... | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ 305,018</u> |

Management Judgments

Due to the complexity of certain contracts, the actual revenue recognition treatment required under Topic 606 for our arrangements may be dependent on contract-specific terms and may vary in some instances.

Revenue is recognized over time for our subscription, maintenance and fixed fee professional services that are separate performance obligations. For professional services, revenue is recognized over time, generally using costs incurred or hours expended to measure progress. Judgment is required in estimating project status and the costs necessary to complete projects. A number of internal and external factors can affect these estimates, including labor rates, utilization, specification variances and testing requirement changes.

If a group of agreements are entered at or near the same time and so closely related that they are, in effect, part of a single arrangement, such agreements are deemed to be combined as one arrangement for revenue recognition purposes. We exercise judgment to evaluate the relevant facts and circumstances in determining whether agreements should be accounted for separately or as a single arrangement. Our judgments about whether a group of contracts comprise a single arrangement can affect the allocation of consideration to the distinct performance obligations, which could have an effect on results of operations for the periods involved.

Practical Expedients and Exemptions

There are several practical expedients and exemptions allowed under Topic 606 that impact timing of revenue recognition and our disclosures. Below is a list of practical expedients applied by us:

- We do not evaluate a contract for a significant financing component if payment is expected within one year or less from the transfer of the promised items to the customer.
- We generally expense sales commissions and sales agent fees when incurred when the amortization period would have been one year or less. These costs are recorded within sales and marketing expense in the Consolidated Statement of Operations and Comprehensive (Loss) Income.
- We do not disclose the value of unsatisfied performance obligations for contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed (applies to time-and-material engagements).

Costs to Obtain and Fulfill a Contract

Our incremental direct costs of obtaining a contract consist of sales commissions and sales agent fees which are deferred and amortized ratably over the term of economic benefit which we have determined to be five years. These deferred costs are classified as current or non-current based on the timing of when we expect to recognize the expense. The current and non-current portions of deferred commissions are included in other current assets and other long-term assets, respectively, in our Consolidated Balance Sheets.

Costs to fulfill a contract, which are incurred upon initiation of certain services contracts and are related to initial customer setup, are included in other current assets and long-term assets in the Company's Consolidated Balance Sheets. These costs are amortized over the term of economic benefit which we have determined to be five years.

Recoverability of these costs is subject to various business risks. Quarterly, we compare the carrying value of these assets with the undiscounted future cash flows expected to be generated by them to determine if there is impairment. If impaired, these assets are reduced to an estimated fair value on a discounted cash flow basis. No impairment losses were recognized during the twelve months ended January 31, 2020.

Income Taxes. We are a U.S. based multinational company subject to tax in the U.S. (federal and state) and numerous foreign jurisdictions. Tax laws, regulations, and administrative practices in various jurisdictions may be subject to significant change, with or without notice, due to economic, political, and other conditions. Significant judgment is required in evaluating and estimating our provision and accruals for these taxes. There are many transactions that occur during the ordinary course of business for which the ultimate tax determination is uncertain. Our effective tax rate could be affected by numerous factors, such as intercompany transactions, the relative amount of foreign earnings, including earnings being lower than anticipated in jurisdictions where we have lower statutory rates and higher than anticipated in jurisdictions where we have higher statutory tax rates, the applicability of special tax regimes, losses incurred in jurisdictions for which we are not able to realize the related tax benefit, changes in our deferred tax assets and liabilities and their valuation, and changes in the relevant tax law, accounting, and other laws, regulations, administrative practices, principles and interpretations.

In December 2017, the Tax Act was signed into law. The Tax Act significantly changes how the U.S. taxes corporations. The Tax Act requires complex computations to be performed that were not previously required; significant judgments to be made in interpretation of the provisions and significant estimates in calculations. The U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies could interpret or issue guidance on how provisions of the Tax Act will be applied or otherwise administered that is different from our interpretation.

On March 27, 2020, the U.S. government enacted the "Coronavirus Aid, Relief and Economic Security Act (CARES Act)". The CARES Act, among other things, includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. We continue to examine the impacts the CARES Act may have on our business.

The provision for income taxes is computed using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in

the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the consolidated Statements of Operations and Comprehensive (Loss) Income in the period that includes the enactment date.

We report a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a return. The amount of income tax we pay is subject to ongoing audits by federal, state and foreign tax authorities, which sometimes results in proposed assessments. Our estimate of the potential outcome for any uncertain tax position requires judgment. For tax related contingencies, we account for uncertain tax positions based on a two-step approach: recognition and measurement. We recognize a tax position when we determine that it is more likely than not that the position will be sustained upon ultimate settlement with a taxing authority that has full knowledge of all relevant information. For those positions that do not meet the recognition threshold, no tax benefit is recognized in the financial statements. For those tax positions that meet the recognition threshold, we measure the tax position as the largest amount of benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. We record interest and penalties related to income tax liabilities as income tax expense. We have reserves to address tax positions that could be challenged by taxing authorities, even though we believe that the positions taken are appropriate. Our tax reserves are reviewed at each balance sheet date and adjusted as events occur that could affect our liability.

Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are more likely than not expected to be realized based on the weight of positive and negative evidence. Future realization of deferred tax assets ultimately depends on the existence of sufficient taxable income within the carryback or carryforward periods available under the applicable tax law. We regularly review deferred tax assets for recoverability based on historical taxable income, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Our judgments regarding future profitability may change due to many factors, including future market conditions and the ability to successfully execute our business plans. Should there be a change in the ability to recover deferred tax assets, the tax provision would increase or decrease in the period in which the assessment is changed.

The carrying value of our deferred tax assets reflects an amount that is more likely than not to be realized with taxable income generated by results of future operations. At January 31, 2020, we had \$14.0 million of deferred tax assets, net of valuation allowances and uncertain tax positions, consisting of \$66.0 million of gross deferred tax assets offset by valuation allowances of \$51.0 million and uncertain tax positions of \$1.0 million. For the year ended January 31, 2020, management continued to maintain a full valuation allowance on its U.S. federal and state deferred tax assets. The valuation allowance increased by \$16.1 million primarily due to a valuation allowance that was placed on the Company's Irish principal's net deferred tax assets.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Exchange Rates. We have operations in foreign locations around the world and we are exposed to risk resulting from fluctuations in foreign currency exchange rates. We have experienced significant foreign currency fluctuations in fiscal 2020 due primarily to the volatility of the euro and British pound in relation to the U.S. dollar. However, while strengthening of the U.S. dollar compared to foreign currency exchange rates generally has the effect of reducing revenues it also has the effect of reducing expenses denominated in currencies other than the U.S. dollar. These foreign currency exchange rate movements could create a foreign currency gain or loss that could be realized or unrealized for us. Unfavorable movements in foreign currency exchange rates between the U.S. dollar and other foreign currencies may have an adverse impact on our operations. We did not have any foreign currency forward or option contracts, other foreign currency denominated derivatives or other financial instruments open as of January 31, 2020.

We face two risks related to foreign currency exchange rates—translation risk and transaction risk. Amounts invested in our foreign operations are translated into U.S. dollars using period-end exchange rates. The resulting translation adjustments are recorded as a component of accumulated other comprehensive loss in the Consolidated Balance Sheets. Revenues and expenses in foreign currencies translate into higher or lower revenues and expenses in U.S. dollars as the U.S. dollar weakens or strengthens against other currencies. Our international subsidiaries also hold U.S. dollar and euro-based net monetary accounts subject to revaluation that results in realized or unrealized foreign currency gains or losses. Furthermore, we have exposure to foreign exchange fluctuations arising from the remeasurement of non-functional currency assets, liabilities and intercompany balances into U.S. dollars for financial reporting purposes.

For fiscal 2020 approximately 50% of our revenue was denominated in foreign currencies, compared with 51% for both fiscal 2019 and 2018. We also incurred a significant portion of our expenses in currencies other than the U.S. dollar, approximately 40% for fiscal 2020 and 41% for both fiscal 2019 and 2018. Based on a hypothetical 10% adverse movement in all foreign currency exchange rates, our revenue would be adversely affected by approximately 5% partially offset by a

positive effect on our expenses of approximately 4%, and our operating income would be adversely affected by approximately 46%.

For fiscal 2020, 2019 and 2018, foreign currency transaction and remeasurement (gains) losses totaled \$(0.1) million, \$(0.2) million and \$2.5 million, respectively, and are included in “Other (income) expense, net” in our Consolidated Statements of Operations and Comprehensive (Loss) Income. We performed a sensitivity analysis on the net U.S. dollar and euro-based monetary accounts subject to revaluation that are held by our international subsidiaries and on the non-functional currency assets, liabilities and intercompany balances that are remeasured into U.S. dollars. A hypothetical 10% adverse movement in all foreign currency exchange rates would result in foreign currency transaction and remeasurement losses of approximately \$4.3 million.

These estimates assume an adverse shift in all foreign currency exchange rates against the U.S. dollar, which do not always move in the same direction or in the same degrees, and actual results may differ materially from the hypothetical analysis.

Interest Rates. We invest our surplus cash in a variety of financial instruments, consisting principally of short-term marketable securities with maturities of less than 90 days at the date of purchase. Our investment securities are held for purposes other than trading. Cash balances held by subsidiaries are invested primarily in registered money market funds with local operating banks. Based on an interest rate sensitivity analysis of our cash and equivalents, we estimate a 10% adverse change in interest rates from the 2020 fiscal year-end rates would not have a material adverse effect on our cash flows or financial condition for the next fiscal year.

Our debt is comprised of a loan agreement, secured by real property, which bears interest at the one-month LIBOR rate plus 2.25%. In conjunction with the loan agreement we entered into an interest rate swap. The swap agreement has an initial notional amount and schedule matching that of the underlying loan that synthetically fixes the interest rate on the debt at 4.31%.

Our interest rate swap is accounted for using mark-to-market accounting. Accordingly, changes in the fair value of the swap each reporting period are adjusted through earnings, subjecting us to non-cash volatility in our results of operations. We prepared a sensitivity analysis using a modeling technique that measures the change in the fair values arising from a hypothetical 10% adverse movement in levels of interest rates across the entire yield curve, with all other variables held constant. Based upon the results of this analysis a 10% adverse change in interest rates from the January 31, 2020 rates would cause less than a \$0.1 million reduction in our results of operations. We believe it is prudent to hedge the expected volatility of the variable rate mortgage on our corporate headquarters. The swap fixes the interest rate on our mortgage to 4.31% over the entire term of the mortgage. Although the agreement allows us to prepay the loan and exit the agreement early, we have no intention of doing so. As a result, we will have non-cash adjustments through earnings each reporting period. However, over the term of the mortgage, the net impact of these mark-to-market adjustments on earnings will be zero.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The response to this item is included in Item 15 of this Annual Report on Form 10-K.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

(a) Evaluation of Disclosure Controls and Procedures

QAD maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in reports that it files or submits under the Securities Exchange Act of 1934 (the “Exchange Act”) is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to management, including the Chief Executive Officer and the Chief Financial Officer, to allow timely decisions regarding required disclosure. QAD’s management, under the supervision and with the participation of the Chief Executive Officer and the Chief Financial Officer, evaluated the effectiveness of QAD’s disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, QAD’s Chief Executive Officer and Chief Financial Officer have concluded that QAD’s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective at a reasonable assurance level.

(b) Management’s Report on Internal Control Over Financial Reporting

QAD’s management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. QAD’s system of internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. QAD’s internal control over financial reporting includes those policies and procedures that: (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of QAD’s assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that QAD’s receipts and expenditures are being made only in accordance with authorizations of QAD’s management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of QAD’s assets that could have a material effect on the financial statements.

Management has assessed the effectiveness of QAD’s internal control over financial reporting as of January 31, 2020 based on the criteria described in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on management’s assessment, management has concluded that QAD’s internal control over financial reporting was effective at the reasonable assurance level as of January 31, 2020. We reviewed the results of management’s assessment with our Audit Committee.

Our independent registered public accounting firm, KPMG LLP, has audited our internal control over financial reporting as of January 31, 2020, as stated in their report included in this Annual Report on Form 10-K.

(c) Changes in Internal Control over Financial Reporting

Effective February 1, 2019, we adopted ASU 2016-02 *Leases* (Topic 842), and all related amendments, which resulted in the modification of certain processes and internal controls related to leases. These included the development of new policies and training, ongoing contract review requirements, and gathering of information provided for disclosures. There were no other changes in the Company’s internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Exchange Act Rules 13a-15 or 15d-15 that occurred during our last fiscal quarter that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

(d) Limitations on the Effectiveness of Controls

QAD’s management does not expect that its disclosure controls and procedures or its internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. 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, within QAD have been detected. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance 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.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information regarding QAD directors is set forth in the section entitled “Election of Directors” appearing in our Definitive Proxy Statement for the Annual Meeting of Stockholders (Proxy Statement) to be filed with the Securities and Exchange Commission within 120 days after the end of our fiscal year ended January 31, 2020, which information is incorporated herein by reference. In addition, the other information required by Item 10 is incorporated by reference from the Proxy Statement.

The Board has adopted the Company’s “*Code of Business Conduct*,” which promotes the highest ethical standards in all of the Company’s business dealings. The Code of Business Conduct applies to the Company’s directors and employees, including the Chief Executive Officer, the Chief Financial Officer and the Chief Accounting Officer. The Board has also approved, and the Company has adopted, a “*Code of Ethics for the Chief Executive Officer and Senior Financial Officers of QAD Inc.*” (the “Code of Ethics”) in order to satisfy the SEC’s requirements for a code of ethics for senior financial officers. The Code of Business Conduct and the Code of Ethics are available on the Company’s Internet site at www.qad.com, under “Investor Relations — Corporate Governance.”

EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below is certain information concerning our executive officers. All ages are as of March 31, 2020.

| NAME | AGE | POSITION(S) |
|-----------------------|-----|--------------------------------------------------------------------------|
| Anton Chilton..... | 52 | Chief Executive Officer and Director |
| Pamela M. Lopker..... | 65 | President and Director |
| Daniel Lender..... | 53 | Chief Financial Officer and Executive Vice President |
| Kara Bellamy..... | 44 | Chief Accounting Officer, Corporate Controller and Senior Vice President |

Anton Chilton was appointed Chief Executive Officer and a member of QAD’s Board of Directors in December 2018. Before that, he served as Chief, Global Field Operations and Executive Vice President commencing in March 2017. Previously, he served as Executive Vice President, Global Services beginning in June 2015. Mr. Chilton joined QAD in 2004 as Services Director of the Company’s Asia-Pacific region, based in Hong Kong. He subsequently served as Managing Director of QAD Australia and New Zealand from 2006 to 2009. Mr. Chilton transferred to QAD’s headquarters in 2009, serving as Senior Vice President – Strategic Global Accounts until 2011, when he became Senior Vice President - Professional Services. Prior to joining QAD, Mr. Chilton held senior roles in global systems integration at Atos Origin and Cap Gemini. Mr. Chilton began his career at British Steel designing software and infrastructure solutions and received his education in the Submarine Service, British Royal Navy. Mr. Chilton has an Executive MBA from INSEAD.

Pamela M. Lopker founded QAD in 1979 and has been President since QAD Inc.’s incorporation in 1986. Ms. Lopker also served as Chairman of the Board from its incorporation until August 2018. Prior to founding QAD, Ms. Lopker served as Senior Systems Analyst for Comtek Research from 1977 to 1979. She is certified in Production and Inventory Management by the American Production and Inventory Control Society. Ms. Lopker earned a Bachelor of Arts degree in Mathematics from the University of California, Santa Barbara. The Board nominated Ms. Lopker to serve as a director because she is the founder and visionary for the Company, with over forty years of enterprise software company experience, extensive software industry expertise and a deep understanding of the Company’s products, customers, industry and global operational issues. Her history with and knowledge of QAD, combined with her unique skills, is important to the Board’s oversight of long-term strategy and provides the Board with a deep understanding of the Company’s business and operations.

Daniel Lender was first appointed Chief Financial Officer and Executive Vice President in July 2003. Previously, he served as QAD’s Vice President of Global Sales Operations and Vice President of Latin America. Mr. Lender joined QAD in 1998 as Treasurer following a nine-year tenure with the former Republic National Bank of New York, last serving as Vice President and Treasurer of the Bank’s Delaware subsidiary. He earned a Master of Business Administration degree from the Wharton School of the University of Pennsylvania and a Bachelor of Science degree in applied economics and business management from Cornell University.

Kara Bellamy has served as Chief Accounting Officer, Corporate Controller and Senior Vice President since January 2008. Previously, she served as QAD's Director of Finance, Americas beginning in 2006 and joined QAD as Assistant Corporate Controller in 2004. Prior to joining QAD, Ms. Bellamy served as Corporate Controller for Somera Communications, Inc. from 2002 through 2004. Prior to that, she was an audit manager with Ernst & Young. Ms. Bellamy is a Certified Public Accountant (inactive) and received a Bachelor of Arts degree in business economics with an accounting emphasis from the University of California, Santa Barbara.

ITEM 11. EXECUTIVE COMPENSATION

Information regarding executive compensation is set forth under the caption "Executive Compensation" in the Proxy Statement, which information is incorporated herein by reference.

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

Information regarding security ownership of certain beneficial owners and management is set forth under the caption "Stock Ownership of Directors, Executive Officers and Certain Beneficial Owners" in the Proxy Statement, which information is incorporated herein by reference.

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

Information regarding certain relationships and related transactions is set forth under the caption "Certain Relationships and Related Party Transactions" in the Proxy Statement, which information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information regarding services performed by, and fees paid to, our independent auditors is set forth under the caption "Principal Accountant Fees and Services" in the Proxy Statement, which information is incorporated herein by reference.

PART IV

ITEM 15. *EXHIBITS, FINANCIAL STATEMENT SCHEDULES*

1. INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

| | <u>Page</u> |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Report of Independent Registered Public Accounting Firm..... | 56 |
| Consolidated Balance Sheets as of January 31, 2020 and 2019 | 58 |
| Consolidated Statements of Operations and Comprehensive (Loss) Income for the years ended January 31, 2020, 2019 and 2018 | 59 |
| Consolidated Statements of Stockholders' Equity for the years ended January 31, 2020, 2019 and 2018 | 60 |
| Consolidated Statements of Cash Flows for the years ended January 31, 2020, 2019 and 2018 | 61 |
| Notes to Consolidated Financial Statements | 62 |

2. INDEX TO FINANCIAL STATEMENT SCHEDULES

The following financial statement schedule is filed as a part of this Annual Report on Form 10-K:

| | <u>Page</u> |
|------------------------------------------------------------|--------------------|
| SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS | 91 |

All other schedules are omitted because they are not required or the required information is presented in the financial statements or notes thereto.

3. INDEX OF EXHIBITS

See the Index of Exhibits at page 92.

ITEM 16. *FORM 10-K SUMMARY*

None.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
QAD Inc.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of QAD Inc. and subsidiaries (the Company) as of January 31, 2020 and 2019, the related consolidated statements of operations and comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended January 31, 2020, and the related notes and financial statement schedule II (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of January 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of January 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three-year period ended January 31, 2020, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 31, 2020 based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for leases as of February 1, 2019, due to the adoption of Accounting Standards Codification (ASC) Topic 842, *Leases*, and as discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for revenue recognition as of February 1, 2018, due to the adoption of ASC Topic 606, *Revenue from Contracts with Customers*.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures

that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

/s/ KPMG LLP

We have served as the Company's auditor since 1990.

Los Angeles, California

April 13, 2020

QAD INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share data)

| | <u>January 31,</u> <u>2020</u> | <u>January 31,</u> <u>2019</u> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------------|
| Assets | | |
| Current assets: | | |
| Cash and equivalents | \$ 136,717 | \$ 139,413 |
| Short-term investments..... | — | 1,200 |
| Accounts receivable, net of allowances of \$2,940 and \$2,901 at January 31, 2020 and January 31, 2019, respectively | 80,968 | 81,577 |
| Prepaid expenses and other current assets, net | 24,952 | 22,150 |
| Total current assets..... | <u>242,637</u> | <u>244,340</u> |
| Property and equipment, net of accumulated depreciation and amortization of \$38,861 and \$39,173 at January 31, 2020 and January 31, 2019, respectively | 28,687 | 29,621 |
| Lease right-of-use assets | 18,329 | — |
| Capitalized software costs, net | 1,922 | 1,598 |
| Goodwill..... | 12,388 | 12,423 |
| Deferred tax assets, net..... | 5,834 | 16,172 |
| Other assets, net..... | 13,007 | 13,020 |
| Total assets..... | <u>\$ 322,804</u> | <u>\$ 317,174</u> |
| Liabilities and Stockholders' Equity | | |
| Current liabilities: | | |
| Current portion of long-term debt | \$ 503 | \$ 487 |
| Lease liabilities..... | 4,371 | — |
| Accounts payable | 9,840 | 9,902 |
| Deferred revenue | 118,413 | 115,253 |
| Other current liabilities..... | 39,900 | 40,348 |
| Total current liabilities | <u>173,027</u> | <u>165,990</u> |
| Long-term debt..... | 12,341 | 12,836 |
| Long-term lease liabilities | 14,612 | — |
| Other liabilities..... | 6,759 | 5,101 |
| Total liabilities..... | <u>206,739</u> | <u>183,927</u> |
| Commitments and contingencies (Note 12) | | |
| Stockholders' equity: | | |
| Preferred stock, \$0.001 par value. Authorized 5,000,000 shares; none issued or outstanding..... | — | — |
| Common stock: | | |
| Class A, \$0.001 par value. Authorized 71,000,000 shares; issued 17,108,846 and 16,605,215 shares at January 31, 2020 and January 31, 2019, respectively | 17 | 16 |
| Class B, \$0.001 par value. Authorized 4,000,000 shares; issued 3,537,380 shares at both January 31, 2020 and January 31, 2019..... | 4 | 4 |
| Additional paid-in capital | 197,824 | 196,723 |
| Treasury stock, at cost (216,378 Class B shares at January 31, 2020 and 241,667 Class A shares and 273,474 Class B shares at January 31, 2019) | (3,226) | (7,350) |
| Accumulated deficit | (70,209) | (48,485) |
| Accumulated other comprehensive loss | (8,345) | (7,661) |
| Total stockholders' equity | <u>116,065</u> | <u>133,247</u> |
| Total liabilities and stockholders' equity..... | <u>\$ 322,804</u> | <u>\$ 317,174</u> |

See accompanying notes to consolidated financial statements.

QAD INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE (LOSS) INCOME
(in thousands, except per share data)

| | Years Ended January 31, | | |
|----------------------------------------------------------|-------------------------|------------------|-------------------|
| | 2020 | 2019 | 2018 |
| Revenue: | | | |
| Subscription..... | \$ 107,168 | \$ 91,861 | \$ 69,615 |
| License..... | 16,570 | 25,568 | 25,807 |
| Maintenance..... | 117,896 | 122,936 | 128,142 |
| Professional services..... | 69,138 | 92,651 | 81,454 |
| Total revenue..... | <u>310,772</u> | <u>333,016</u> | <u>305,018</u> |
| Costs of revenue: | | | |
| Subscription..... | 38,451 | 34,128 | 30,563 |
| License..... | 2,308 | 2,714 | 2,946 |
| Maintenance..... | 29,702 | 31,307 | 31,246 |
| Professional services..... | 69,448 | 87,735 | 84,670 |
| Total cost of revenue..... | <u>139,909</u> | <u>155,884</u> | <u>149,425</u> |
| Gross profit..... | <u>170,863</u> | <u>177,132</u> | <u>155,593</u> |
| Operating expenses: | | | |
| Sales and marketing..... | 82,115 | 78,207 | 75,368 |
| Research and development..... | 54,726 | 53,993 | 47,661 |
| General and administrative..... | 39,442 | 35,248 | 35,222 |
| Amortization of intangible assets from acquisitions..... | 268 | 111 | 416 |
| Total operating expenses..... | <u>176,551</u> | <u>167,559</u> | <u>158,667</u> |
| Operating (loss) income..... | <u>(5,688)</u> | <u>9,573</u> | <u>(3,074)</u> |
| Other (income) expense: | | | |
| Interest income..... | (2,782) | (2,600) | (1,547) |
| Interest expense..... | 630 | 643 | 669 |
| Other expense (income), net..... | 68 | (387) | 2,012 |
| Total other (income) expense, net..... | <u>(2,084)</u> | <u>(2,344)</u> | <u>1,134</u> |
| (Loss) income before income taxes..... | (3,604) | 11,917 | (4,208) |
| Income tax expense..... | <u>12,345</u> | <u>1,489</u> | <u>4,857</u> |
| Net (loss) income..... | <u>\$ (15,949)</u> | <u>\$ 10,428</u> | <u>\$ (9,065)</u> |
| Basic net (loss) income per share: | | | |
| Class A..... | \$ (0.82) | \$ 0.55 | \$ (0.49) |
| Class B..... | \$ (0.69) | \$ 0.46 | \$ (0.41) |
| Diluted net (loss) income per share: | | | |
| Class A..... | \$ (0.82) | \$ 0.50 | \$ (0.49) |
| Class B..... | \$ (0.69) | \$ 0.44 | \$ (0.41) |
| Net (loss) income..... | \$ (15,949) | \$ 10,428 | \$ (9,065) |
| Other comprehensive (loss) income, net of tax: | | | |
| Foreign currency translation adjustment..... | (684) | (833) | 1,803 |
| Total comprehensive (loss) income..... | <u>\$ (16,633)</u> | <u>\$ 9,595</u> | <u>\$ (7,262)</u> |

See accompanying notes to consolidated financial statements.

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

| | Number of Shares | | | Amount | | Additional Paid-in Capital | Treasury Stock | Accumulated Deficit | Accumulated Other Comprehensive Loss | Total Stockholders' Equity |
|-------------------------------------------------------------------------------------------------|------------------|------------|----------|------------|------------|----------------------------------|-------------------|------------------------|-----------------------------------------------|----------------------------------|
| | Class A | Class B | Treasury | Class A | Class B | | | | | |
| Balance, January 31, 2017 | 16,605 | 3,537 | (1,125) | \$ 16 | \$ 4 | \$ 197,594 | \$ (15,170) | \$ (61,127) | \$ (8,631) | \$ 112,686 |
| Net loss | — | — | — | — | — | — | — | (9,065) | — | (9,065) |
| Foreign currency translation adjustments | — | — | — | — | — | — | — | — | 1,803 | 1,803 |
| Stock award exercises | — | — | 63 | — | — | (2,118) | 1,129 | — | — | (989) |
| Stock compensation expense | — | — | — | — | — | 8,924 | — | — | — | 8,924 |
| Dividends declared (\$0.288 and \$0.24 per Class A and Class B share, respectively) | — | — | — | — | — | — | — | (5,367) | — | (5,367) |
| Restricted stock | — | — | 170 | — | — | (3,944) | 1,580 | — | — | (2,364) |
| Balance, January 31, 2018 | 16,605 | 3,537 | (892) | \$ 16 | \$ 4 | \$ 200,456 | \$ (12,461) | \$ (75,559) | \$ (6,828) | \$ 105,628 |
| Cumulative effect of the adoption of ASC606 and ASU2016-16 | — | — | — | — | — | — | — | 22,125 | — | 22,125 |
| Adjusted balance at February 1, 2018 | 16,605 | 3,537 | (892) | \$ 16 | \$ 4 | \$ 200,456 | \$ (12,461) | \$ (53,434) | \$ (6,828) | \$ 127,753 |
| Net income | — | — | — | — | — | — | — | 10,428 | — | 10,428 |
| Foreign currency translation adjustments | — | — | — | — | — | — | — | — | (833) | (833) |
| Stock award exercises | — | — | 196 | — | — | (7,878) | 3,430 | — | — | (4,448) |
| Stock compensation expense | — | — | — | — | — | 10,122 | — | — | — | 10,122 |
| Dividends declared (\$0.288 and \$0.24 per Class A and Class B share, respectively) | — | — | — | — | — | — | — | (5,479) | — | (5,479) |
| Restricted stock | — | — | 181 | — | — | (5,977) | 1,681 | — | — | (4,296) |
| Balance, January 31, 2019 | 16,605 | 3,537 | (515) | \$ 16 | \$ 4 | \$ 196,723 | \$ (7,350) | \$ (48,485) | \$ (7,661) | \$ 133,247 |
| Net loss | — | — | — | — | — | — | — | (15,949) | — | (15,949) |
| Foreign currency translation adjustments | — | — | — | — | — | — | — | — | (684) | (684) |
| Stock award exercises | 492 | — | 126 | 1 | — | (4,615) | 1,943 | — | — | (2,671) |
| Stock compensation expense | — | — | — | — | — | 11,354 | — | — | — | 11,354 |
| Dividends declared (\$0.288 and \$0.24 per Class A and Class B share, respectively) | — | — | — | — | — | — | — | (5,617) | — | (5,617) |
| Restricted stock | 12 | — | 173 | — | — | (5,638) | 2,181 | — | — | (3,457) |
| Adoption of ASU2016-02, <i>Leases</i> (Topic 842) | — | — | — | — | — | — | — | (158) | — | (158) |
| Balance, January 31, 2020 | 17,109 | 3,537 | (216) | \$ 17 | \$ 4 | \$ 197,824 | \$ (3,226) | \$ (70,209) | \$ (8,345) | \$ 116,065 |

See accompanying notes to consolidated financial statements.

QAD INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

| | Years Ended January 31, | | |
|------------------------------------------------------------------------------------------|--------------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| Cash flows from operating activities: | | | |
| Net (loss) income | \$ (15,949) | \$ 10,428 | \$ (9,065) |
| Adjustments to reconcile net (loss) income to net cash provided by operating activities: | | | |
| Depreciation and amortization | 6,412 | 5,517 | 5,772 |
| Amortization of costs capitalized to obtain and fulfill contracts | 4,455 | 4,176 | — |
| Provision for doubtful accounts and sales adjustments | 485 | 1,752 | 1,021 |
| Amortization of right-of-use assets | 5,964 | — | — |
| Loss on disposal of property and equipment | 78 | 34 | 85 |
| Net change in valuation allowance | 16,179 | 3,224 | 1,695 |
| Other deferred income taxes | (6,497) | (4,677) | (2,171) |
| Change in fair value of a derivative instrument | 368 | 51 | (377) |
| Stock compensation expense | 11,354 | 10,122 | 8,924 |
| Other, net | 59 | — | — |
| Changes in assets and liabilities, net of effects from acquisitions: | | | |
| Accounts receivable | (924) | (1,515) | (12,562) |
| Costs capitalized to obtain and fulfill contracts | (5,792) | (4,130) | — |
| Lease liabilities | (6,077) | — | — |
| Prepaid and other assets | (413) | (2,890) | (1,204) |
| Accounts payable | 151 | (4,369) | 2,821 |
| Deferred revenue | 6,074 | 3,031 | 7,001 |
| Other liabilities | 1,070 | (1,747) | 8,478 |
| Net cash provided by operating activities | <u>16,997</u> | <u>19,007</u> | <u>10,418</u> |
| Cash flows from investing activities: | | | |
| Purchase of property and equipment | (5,671) | (4,340) | (3,720) |
| Acquisition of businesses, net of cash acquired | — | (2,655) | — |
| Capitalized software costs | (1,243) | (1,067) | (1,019) |
| Purchase of short-term investments | (1,200) | (1,200) | — |
| Proceeds from short-term investments | 2,400 | — | — |
| Other, net | 2 | 4 | 70 |
| Net cash used in investing activities | <u>(5,712)</u> | <u>(9,258)</u> | <u>(4,669)</u> |
| Cash flows from financing activities: | | | |
| Repayments of debt | (530) | (468) | (445) |
| Dividends paid | (5,617) | (5,479) | (5,367) |
| Tax payments related to stock awards | (6,128) | (8,744) | (3,353) |
| Net cash used in financing activities | <u>(12,275)</u> | <u>(14,691)</u> | <u>(9,165)</u> |
| Effect of exchange rates on cash and equivalents | <u>(1,706)</u> | <u>(2,668)</u> | <u>5,357</u> |
| Net (decrease) increase in cash and equivalents | <u>(2,696)</u> | <u>(7,610)</u> | <u>1,941</u> |
| Cash and equivalents at beginning of year | 139,413 | 147,023 | 145,082 |
| Cash and equivalents at end of year | <u>\$ 136,717</u> | <u>\$ 139,413</u> | <u>\$ 147,023</u> |
| Supplemental disclosure of cash flow information: | | | |
| Cash paid during the period for: | | | |
| Interest | \$ 610 | \$ 608 | \$ 651 |
| Income taxes, net of refunds | 3,679 | 3,475 | 3,961 |

See accompanying notes to consolidated financial statements.

QAD INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. SUMMARY OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

BUSINESS

QAD is a leader in cloud-based enterprise software solutions for global manufacturing companies. The Company's solutions, called QAD Adaptive Applications, are designed specifically for automotive suppliers, life sciences, consumer products, food and beverage, high technology and industrial products manufacturers. QAD software offers a full set of core manufacturing enterprise resource planning (ERP) and supply chain planning (SCP) capabilities. The Company's architecture, called the QAD Enterprise Platform, allows customers to upgrade existing functionality by module; and extend or create new applications, providing manufacturers with the flexibility they need to innovate and rapidly adapt to change. QAD was founded in 1979, incorporated in California in 1986 and reincorporated in Delaware in 1997.

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of QAD Inc. and all of its subsidiaries. All subsidiaries are wholly-owned and all significant balances and transactions among the entities have been eliminated from the consolidated financial statements.

USE OF ESTIMATES

The financial statements have been prepared in conformity with U.S. generally accepted accounting principles and, accordingly, include amounts based on informed estimates and judgments of management that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the Company's financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Changes in estimates resulting from continuing changes in the economic environment will be reflected in the financial statements in future periods.

Significant items subject to such estimates and assumptions made by management include, but are not limited to, the determination of:

- the fair value of assets acquired and liabilities assumed for business combinations;
- the average period of benefit associated with deferred contract acquisition and fulfillment costs;
- the fair value of certain stock awards issued;
- the useful life and recoverability of long-lived assets;
- the fair value of assets held for sale; and
- the recognition, measurement and valuation of deferred income taxes.

The World Health Organization declared in March 2020 that the recent outbreak of the coronavirus disease named COVID-19 constitutes a pandemic. The Company has undertaken measures to protect its employees, partners and customers. There can be no assurance that these measures will be effective, however, or that the Company can adopt them without adversely affecting its business operations. In addition, the coronavirus outbreak has created and may continue to create significant uncertainty in global financial markets, which may decrease technology spending, depress demand for the Company's solutions and harm its business and results of operations. As of the date of issuance of the financial statements, the Company is not aware of any specific event or circumstance that would require updates to the Company's estimates and judgments or revisions to the carrying value of its assets or liabilities. These estimates may change, as new events occur and additional information is obtained, and are recognized in the consolidated financial statements as soon as they become known. Actual results could differ from those estimates and any such differences may be material to the financial statements.

RECLASSIFICATION

Certain prior year amounts included in Notes to Consolidated Financial Statements have been reclassified for consistency with the current year presentation.

FOREIGN CURRENCY TRANSLATIONS AND TRANSACTIONS

The financial position and results of operations of the Company's foreign subsidiaries are generally determined using the country's local currency as the functional currency. Assets and liabilities recorded in foreign currencies are translated at the exchange rates on the balance sheet date. Revenue and expenses are translated at average rates of exchange prevailing during the year. Translation adjustments resulting from this process are charged or credited to other comprehensive (loss) income, which is included in "Accumulated other comprehensive loss" within the Consolidated Balance Sheets.

Gains and losses resulting from foreign currency transactions and remeasurement adjustments of monetary assets and liabilities not held in an entity's functional currency are included in earnings. Foreign currency transaction and remeasurement (gains) losses for fiscal 2020, 2019 and 2018 totaled \$(0.1) million, \$(0.2) million and \$2.5 million, respectively, and are included in "Other (income) expense, net" in the accompanying Consolidated Statements of Operations and Comprehensive (Loss) Income.

CASH AND EQUIVALENTS

Cash and equivalents consist of cash and short-term marketable securities with maturities of less than 90 days at the date of purchase. The Company considers all highly liquid investments purchased with an original maturity of 90 days or less to be cash equivalents. At January 31, 2020 and 2019, the Company's cash and equivalents consisted of money market mutual funds invested in U.S. Treasury and government securities, deposit accounts and certificates of deposit.

SHORT-TERM INVESTMENTS

At January 31, 2019, the Company's short-term investments consisted of certificates of deposit with maturities greater than 90 days and less than one year. Short-term investments were classified as held-to-maturity, since the Company had the intent and the ability to hold them to maturity. Short-term investments were recorded at amortized cost, which approximated fair value. The Company considered all of its short-term investments as highly liquid and therefore included these securities within current assets on the Consolidated Balance Sheets. Interest on short-term investments was included as a component of "Interest income".

ACCOUNTS RECEIVABLE, NET

Accounts receivable, net, consisted of the following as of January 31:

| | 2020 | 2019 |
|--------------------------------|-----------------------|------------------|
| | (in thousands) | |
| Accounts receivable | \$ 83,908 | \$ 84,478 |
| Less allowance for: | | |
| Doubtful accounts | (543) | (487) |
| Sales adjustments | (2,397) | (2,414) |
| Accounts receivable, net | <u>\$ 80,968</u> | <u>\$ 81,577</u> |

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The collectability of accounts receivable is reviewed each period by analyzing balances based on age. Specific allowances for doubtful accounts are recorded for any balances that the Company determines may not be fully collectible due to a customer's inability to pay. The Company also provides a general reserve based on historical data including an analysis of write-offs and other known factors. Provisions to the allowance for bad debts are included as bad debt expense in "General and Administrative" expense. The determination to write-off specific accounts receivable balances is based on the likelihood of collection and past due status. Past due status is based on invoice date and terms specific to each customer.

The Company does not generally provide a contractual right of return; however, in the course of business sales adjustments related to customer dispute resolution may occur. A provision is recorded against revenue for estimated sales adjustments in the same period the related revenues are recorded or when current information indicates additional amounts are required. These estimates are based on historical experience, specifically identified customers and other known factors.

ASSETS HELD FOR SALE

During the second quarter of fiscal 2020, the Company vacated its building located in Dublin, Ireland, and moved its operations into leased office space. In fiscal 2020, Company entered into an agreement to sell the building; however, given the current economic environment there is potential risk to the timing and completion of the sale. The net book value of the building of \$1.6 million was classified as assets held for sale, and is included in “Prepaid expenses and other current assets, net” in the accompanying Consolidated Balance Sheet as of January 31, 2020. The net book value approximates fair market value.

FINANCIAL INSTRUMENTS AND CONCENTRATION OF CREDIT RISK

The carrying amounts of cash and equivalents, short-term investments, accounts receivable and accounts payable approximate fair value due to the short-term maturities of these instruments. The Company’s note payable bears a variable market interest rate, subject to certain minimum interest rates. Therefore, the carrying amount outstanding under the note payable reasonably approximates fair value.

Concentration of credit risk with respect to trade receivables is limited due to a large number of customers comprising the Company’s customer base, and their dispersion across many different industries and locations throughout the world. No single customer accounted for 10% or more of the Company’s total revenue during the fiscal year ended January 31, 2020. In the fiscal year ended January 31, 2019 one customer accounted for 10% of total revenue and no other customer accounted for 10% or more of total revenue. During fiscal 2019 the Company performed a large implementation project with a customer which included consulting services the customer needed to help perform activities their employees were responsible for. Without these services, the revenue from this customer would have been less than 10%. No single customer accounted for 10% or more of the Company’s total revenue during the fiscal year ended January 31, 2018. In addition, no single customer accounted for 10% or more of accounts receivable at January 31, 2020 or 2019.

PROPERTY AND EQUIPMENT

Property and equipment are stated at cost. Additions and significant improvements to property and equipment are capitalized, while maintenance and repairs are expensed as incurred. For financial reporting purposes, depreciation is generally expensed via the straight-line method over the useful life of three years for computer equipment and software, five years for furniture and office equipment, 10 years for building improvements, and 39 years for buildings. Leasehold improvements are depreciated over the shorter of the lease term or the useful life of five years.

Certain costs associated with software developed for internal use, including payroll costs for employees, are capitalized once the project has reached the application development stage and are included in property and equipment classified as software. These costs are amortized using the straight-line method over the expected useful life of the software, beginning when the asset is substantially ready for use. Costs incurred related to the preliminary project stage, training and research and development are expensed as incurred.

Property and equipment, net consisted of the following as of January 31:

| | 2020 | 2019 |
|------------------------------------------------------|-----------------------|------------------|
| | (in thousands) | |
| Buildings and building improvements..... | \$ 29,902 | \$ 32,238 |
| Computer equipment and software..... | 18,345 | 17,671 |
| Furniture and office equipment | 8,004 | 7,672 |
| Leasehold improvements..... | 7,382 | 7,309 |
| Land..... | 3,850 | 3,850 |
| Automobiles | 65 | 54 |
| | <u>67,548</u> | <u>68,794</u> |
| Less accumulated depreciation and amortization | (38,861) | (39,173) |
| | <u>\$ 28,687</u> | <u>\$ 29,621</u> |

The changes in property and equipment, net, for the fiscal years ended January 31 were as follows:

| | 2020 | 2019 |
|-------------------------------------------------|-----------------------|------------------|
| | (in thousands) | |
| Cost | | |
| Balance at February 1 | \$ 68,794 | \$ 67,969 |
| Additions | 5,671 | 4,340 |
| Adjustments (1) | (2,234) | - |
| Disposals | (4,286) | (2,512) |
| Impact of foreign currency translation | (397) | (1,003) |
| Balance at January 31 | <u>67,548</u> | <u>68,794</u> |
| Accumulated depreciation | | |
| Balance at February 1 | (39,173) | (37,561) |
| Depreciation | (5,034) | (4,734) |
| Adjustments (1) | 880 | - |
| Disposals | 4,207 | 2,474 |
| Impact of foreign currency translation | 259 | 648 |
| Balance at January 31 | <u>(38,861)</u> | <u>(39,173)</u> |
| Property and equipment, net at January 31 | <u>\$ 28,687</u> | <u>\$ 29,621</u> |

(1) Adjustments relate primarily to a building re-classified to assets held for sale in the second quarter of fiscal 2020.

Depreciation and amortization expense of property and equipment for fiscal 2020, 2019 and 2018 was \$5.1 million, \$4.7 million and \$4.6 million, respectively.

CAPITALIZED SOFTWARE COSTS

The Company capitalizes software development costs incurred in connection with the localization and translation of its products once technological feasibility has been achieved based on a working model. A working model is defined as an operative version of the computer software product that is completed in the same software language as the product to be ultimately marketed, performs all the major functions planned for the product and is ready for initial customer testing (usually identified as beta testing). In addition, the Company capitalizes software purchased from third parties or through business combinations as acquired software technology, if the related software under development has reached technological feasibility.

The amortization of capitalized software costs is the greater of the straight-line basis over three years, the expected useful life, or a computation using a ratio of current revenue for a product compared to the estimated total of current and future revenues for that product.

Capitalized software costs and accumulated amortization at January 31 were as follows:

| | 2020 | 2019 |
|----------------------------------------------|-----------------------|-----------------|
| | (in thousands) | |
| Capitalized software costs: | | |
| Capitalized software development costs | \$ 3,356 | \$ 2,314 |
| Acquired software technology | 135 | 135 |
| | <u>3,491</u> | <u>2,449</u> |
| Less accumulated amortization | (1,569) | (851) |
| Capitalized software costs, net | <u>\$ 1,922</u> | <u>\$ 1,598</u> |

The Company's capitalized software development costs relate to translations and localizations of QAD Adaptive Applications. Acquired software technology costs relate to intellectual property purchased during the second quarter of fiscal 2019.

It is the Company's policy to write off capitalized software development costs once fully amortized. Accordingly, during fiscal 2020, \$0.2 million of costs and accumulated amortization was removed from the Consolidated Balance Sheet and was related to capitalized software development costs which was fully amortized during fiscal 2020.

Amortization of capitalized software costs for fiscal 2020, 2019 and 2018 was \$0.9 million, \$0.6 million and \$0.8 million, respectively. Amortization of capitalized software costs is included in “Cost of license” in the accompanying Consolidated Statements of Operations and Comprehensive (Loss) Income.

The following table summarizes the estimated amortization expense relating to the Company’s capitalized software costs as of January 31, 2020:

| Fiscal Years | (in thousands) |
|------------------|-----------------|
| 2021 | \$ 984 |
| 2022 | 643 |
| 2023 | 280 |
| 2024 | 15 |
| Thereafter | - |
| | <u>\$ 1,922</u> |

INTANGIBLE ASSETS

Intangible assets and accumulated amortization at January 31 were as follows:

| | 2020 | 2019 |
|-----------------------------------------|----------------|-----------------|
| | (in thousands) | |
| Amortizable intangible assets: | | |
| Customer relationships | \$ 1,379 | \$ 1,348 |
| Less accumulated amortization | (394) | (115) |
| Net amortizable intangible assets | <u>\$ 985</u> | <u>\$ 1,233</u> |

The Company’s intangible assets are related to acquisitions completed in the second and third quarters of fiscal 2019. Intangible assets are included in “Other assets, net” in the accompanying Consolidated Balance Sheets, and are amortized over an estimated five year useful life.

Amortization of intangible assets from acquisitions was \$0.3 million, \$0.1 million and \$0.4 million for fiscal 2020, 2019 and 2018, respectively. The following table summarizes the estimated amortization expense relating to the Company’s intangible assets as of January 31, 2020:

| Fiscal Years | (in thousands) |
|------------------|----------------|
| 2021 | \$ 276 |
| 2022 | 276 |
| 2023 | 276 |
| 2024 | 157 |
| Thereafter | - |
| | <u>\$ 985</u> |

IMPAIRMENT ASSESSMENT OF LONG-LIVED ASSETS AND INTANGIBLES OTHER THAN GOODWILL

The Company evaluates long-lived assets, capitalized software and other intangible assets for possible impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. This includes but is not limited to significant adverse changes in business climate, market conditions, or other events that indicate an asset's carrying amount may not be recoverable. Recoverability of these assets is measured by comparing the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate. If the undiscounted cash flows used in the test for recoverability are less than the carrying amount of these assets, the carrying amount of such assets is reduced to fair value.

The Company reviews the impairment of ROU assets consistent with the approach applied for the Company’s other long-lived assets. The Company reviews the recoverability of long-lived assets when events or changes in circumstances occur that indicate the carrying value of the asset may not be recoverable. The assessment of possible impairment is based on the Company’s ability to recover the carrying value of the asset from the expected undiscounted future pre-tax cash flows of the related operations.

There were no impairments of long-lived assets, capitalized software, or other intangible assets during fiscal 2020, 2019, and 2018, respectively.

GOODWILL

The changes in the carrying amount of goodwill for the fiscal years ended January 31, 2019 and 2020 were as follows:

| | Gross Carrying Amount | Accumulated Impairment (in thousands) | Goodwill, Net |
|----------------------------------------------|--------------------------------------|------------------------------------------------------|--------------------------|
| Balance at January 31, 2018..... | \$ 26,631 | (15,608) | 11,023 |
| Additions | 1,510 | — | 1,510 |
| Impact of foreign currency translation | (110) | — | (110) |
| Balance at January 31, 2019..... | 28,031 | (15,608) | 12,423 |
| Impact of foreign currency translation | (35) | — | (35) |
| Balance at January 31, 2020..... | <u>\$ 27,996</u> | <u>\$ (15,608)</u> | <u>\$ 12,388</u> |

Additions to goodwill for the fiscal year ended January 31, 2019 were a result of immaterial acquisitions where the purchase price exceeded the estimated fair value of the acquired net assets. Pro forma financial information for the acquisitions has not been presented, as the effects were not material to the Company's historical consolidated financial statements.

During each of the fourth quarters of fiscal 2020, 2019 and 2018, an impairment analysis was performed at the enterprise level which compared the Company's market capitalization to its net assets as of the test date, November 30. As the market capitalization substantially exceeded the Company's net assets, there was no indication of goodwill impairment for fiscal 2020, 2019 and 2018.

INCOME TAXES

The provision for income taxes is computed using the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the expected future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax laws is recognized in the Consolidated Statements of Operations and Comprehensive (Loss) Income in the period that includes the enactment date.

The Company utilizes a two-step approach to recognizing and measuring uncertain income tax positions (tax contingencies). The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount which is more than 50% likely of being realized upon ultimate settlement. The Company considers many factors when evaluating its tax positions and estimating its tax benefits, which may require periodic adjustments. The Company includes interest and penalties related to its tax contingencies in income tax expense.

Valuation allowances are established when necessary to reduce deferred tax assets to the amounts that are more likely than not expected to be realized based on the weight of positive and negative evidence. Future realization of deferred tax assets ultimately depends on the existence of sufficient taxable income within the carryback or carryforward periods available under the applicable tax law. The Company regularly reviews its deferred tax assets for recoverability based on historical taxable income, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. The Company's judgments regarding future profitability may change due to many factors, including future market conditions and the ability to successfully execute its business plans. Should there be a change in the ability to recover deferred tax assets, the tax provision would increase or decrease in the period in which the assessment is changed.

LEASES

The Company treats a contract as a lease when the contract conveys the right to use a physically distinct asset for a period of time in exchange for consideration, the Company directs the use of the asset and the Company obtains substantially all the economic benefits of the asset. These leases are recorded as right-of-use (ROU) assets and lease obligation liabilities for leases with terms greater than 12 months. ROU assets represent the Company's right to use an underlying asset for the entirety of the lease term. Lease liabilities represent the Company's obligation to make payments over the life of the lease. An ROU asset and a lease liability are recognized at commencement of the lease based on the present value of the lease payments over the life of the lease. Initial direct costs are included as part of the ROU asset upon commencement of the lease. Since the interest rate implicit in a lease is generally not readily determinable, the Company uses an incremental borrowing rate to determine the present value of the lease payments. The incremental borrowing rate represents the rate of interest the Company would have to pay to borrow on a collateralized basis over a similar lease term to obtain an asset of similar value. The Company used the incremental borrowing rate on February 1, 2019 for all leases that commenced prior to that date.

The Company has applied the practical expedient available for lessees in which lease and non-lease components are accounted for as a single lease component for all asset classes. The Company also elected the practical expedient to exclude short-term leases (leases with original terms of 12 months or less) from ROU asset and lease liability accounts.

The Company's operating lease expense is recognized on a straight-line basis over the lease term. Amortization expense of the ROU asset for finance leases is recognized on a straight-line basis over the lease term and interest expense for finance leases is recognized based on the incremental borrowing rate. Variable lease payments are expensed as incurred for both operating and finance leases. Variable payments change due to facts or circumstances occurring after the commencement date, other than the passage of time, and do not result in a remeasurement of lease liabilities. The Company's variable lease payments include payments to lessors for taxes, maintenance, insurance and other operating costs as well as payments that are adjusted based on a CPI index or rate and payments in excess of fixed amounts, such as excess mileage charges on leased autos. The Company's lease agreements do not contain any significant residual value guarantees or restrictive covenants.

STOCK-BASED COMPENSATION

The Company accounts for share-based payments (equity awards) to employees in accordance with ASC 718, *Compensation—Stock Compensation* (ASC 718), which requires that share-based payments (to the extent they are compensatory) be recognized in the Consolidated Statements of Operations and Comprehensive (Loss) Income based on the fair values of the equity awards as measured at the grant date. The fair value of an equity award is recognized as stock-based compensation expense ratably over the vesting period of the equity award. Determining the fair value of equity awards at the grant date requires judgment.

Fair Value of RSUs

The fair value of restricted stock units (RSUs) is determined on the grant date of the award as the market price of the Company's common stock on the date of grant, reduced by the present value of estimated dividends foregone during the vesting period. Judgment is required in determining the present value of estimated dividends foregone during the vesting period. The Company estimates the dividends for purposes of this calculation based on the Company's historical dividend payments per share, which has remained consistent over the last four years.

Fair Value of PSUs

The fair value of performance stock units (PSUs) is determined on the grant date of the award as the market price of the Company's common stock on the date of grant, reduced by the present value of estimated dividends foregone during the vesting period. Judgment is required in determining the present value of estimated dividends foregone during the vesting period. The Company estimates the dividends for purposes of this calculation based on the Company's historical dividend payments per share, which has remained consistent over the last three years. The number of PSUs earned and eligible to vest are determined based on attainment of specified performance criteria. To determine the anticipated achievement of the performance objectives, management must make assumptions regarding the likelihood of the Company meeting those targets. The number of PSUs that vest will be predicated on the Company achieving performance objectives during the measurement period subsequent to the date of grant. Depending on the financial performance levels achieved, a percentage of the PSUs (0% to 200% of the target award) will vest to the grantees of those stock units.

Fair Value of SARs

The fair value of stock-settled stock appreciation rights (SARs) is determined on the grant date of the award using the Black-Scholes-Merton valuation model. One of the inputs to the Black-Scholes-Merton valuation model is the fair market value of the Company's stock on the date of grant. Judgment is required in determining the remaining inputs to the Black-Scholes-Merton valuation model. These inputs include the expected life, volatility, the risk-free interest rate and the dividend rate. The following describes the Company's policies with respect to determining these valuation inputs:

Expected Life - The expected life valuation input includes a computation that is based on historical vested SAR exercises and post-vest expiration patterns and an estimate of the expected life for SARs that were fully vested and outstanding. Furthermore, based on the Company's historical pattern of SAR exercises and post-vest expiration patterns the Company determined that there are two discernible populations which include the Company's directors and officers (D&O) and all other QAD employees. The estimate of the expected life for SARs that were fully vested and outstanding is determined as the midpoint of a range as follows: the low end of the range assumes the fully vested and outstanding SARs are exercised or expire unexercised on the vest date and the high end of the range assumes that these SARs are exercised or expire unexercised upon the contractual termination date.

Volatility - The volatility valuation input is based on the historical volatility of the Company's common stock, which the Company believes is representative of the expected volatility over the expected life of SARs.

Risk-Free Interest Rate - The risk-free interest rate is based on the U.S. Treasury constant maturities in effect at the time of grant for the expected term of the SARs.

Dividend Rate - The dividend rate is based on the Company's historical dividend payments per share.

The Company records deferred tax assets for equity awards that result in deductions on its income tax returns, based on the amount of stock-based compensation recognized and the fair values attributable to the vested portion of those equity awards. Because the deferred tax assets the Company records are based upon the stock-based compensation expenses in a particular jurisdiction, the aforementioned inputs that affect the fair values of equity awards may also indirectly affect income tax expense. If the tax deduction is less than the deferred tax asset, the calculated shortfall would increase income tax expense. If the tax deduction is more than the deferred tax asset, the calculated windfall would decrease income tax expense.

COMPREHENSIVE (LOSS) INCOME

Comprehensive (loss) income includes changes in the balances of items that are reported directly as a separate component of stockholders' equity on the Consolidated Balance Sheets. The components of comprehensive (loss) income are net (loss) income and foreign currency translation adjustments. The Company does not provide for income taxes on foreign currency translation adjustments since it does not provide for taxes on the unremitted earnings of its foreign subsidiaries. The changes in accumulated other comprehensive loss are included in the Company's Consolidated Statements of Operations and Comprehensive (Loss) Income.

ADVERTISING EXPENSES

Advertising costs are expensed as incurred. Advertising expenses were \$0.6 million, \$0.7 million and \$0.7 million for fiscal years 2020, 2019 and 2018.

RESEARCH AND DEVELOPMENT

All costs incurred to establish the technological feasibility of the Company's software products are expensed to research and development (R&D) as incurred. R&D expenses totaled \$54.7 million, \$54.0 million and \$47.7 million in fiscal years 2020, 2019 and 2018, respectively.

OTHER (INCOME) EXPENSE, NET

The components of other (income) expense, net for fiscal 2020, 2019 and 2018 were as follows:

| | Years Ended January 31, | | |
|--------------------------------------------------|-------------------------|-------------------|-----------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Interest income | \$ (2,782) | \$ (2,600) | \$ (1,547) |
| Interest expense | 630 | 643 | 669 |
| Foreign exchange (gains) losses | (50) | (229) | 2,466 |
| Change in fair value of interest rate swap | 368 | 51 | (377) |
| Other income, net | (250) | (209) | (77) |
| Total other (income) expense, net | <u>\$ (2,084)</u> | <u>\$ (2,344)</u> | <u>\$ 1,134</u> |

COMPUTATION OF NET (LOSS) INCOME PER SHARE

Net (loss) income per share of Class A common stock and Class B common stock is computed using the two-class method. Holders of Class A common stock are entitled to cash or stock dividends equal to 120% of the amount of such dividend payable with respect to a share of Class B common stock.

The following table sets forth the computation of basic and diluted net (loss) income per share:

| | Years Ended January 31, | | |
|------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------|--------------------|
| | 2020 | 2019 | 2018 |
| | (in thousands, except per share data) | | |
| Net (loss) income | \$ (15,949) | \$ 10,428 | \$ (9,065) |
| Less: dividends declared | (5,617) | (5,479) | (5,367) |
| Undistributed net (loss) income | <u>\$ (21,566)</u> | <u>\$ 4,949</u> | <u>\$ (14,432)</u> |
| Net (loss) income per share – Class A Common Stock | | | |
| Dividends declared | \$ 4,827 | \$ 4,696 | \$ 4,596 |
| Allocation of undistributed net (loss) income | (18,519) | 4,243 | (12,358) |
| Net (loss) income attributable to Class A common stock | <u>\$ (13,692)</u> | <u>\$ 8,939</u> | <u>\$ (7,762)</u> |
| Weighted average shares of Class A common stock outstanding— <i>basic</i> | 16,709 | 16,267 | 15,942 |
| Weighted average potential shares of Class A common stock | — | 1,585 | — |
| Weighted average shares of Class A common stock and potential common shares outstanding— <i>diluted</i> | <u>16,709</u> | <u>17,852</u> | <u>15,942</u> |
| Basic net (loss) income per Class A common share | <u>\$ (0.82)</u> | <u>\$ 0.55</u> | <u>\$ (0.49)</u> |
| Diluted net (loss) income per Class A common share | <u>\$ (0.82)</u> | <u>\$ 0.50</u> | <u>\$ (0.49)</u> |
| Net (loss) income per share – Class B Common Stock | | | |
| Dividends declared | \$ 790 | \$ 783 | \$ 771 |
| Allocation of undistributed net (loss) income | (3,047) | 706 | (2,074) |
| Net (loss) income attributable to Class B common stock | <u>\$ (2,257)</u> | <u>\$ 1,489</u> | <u>\$ (1,303)</u> |
| Weighted average shares of Class B common stock outstanding— <i>basic</i> | 3,289 | 3,256 | 3,213 |
| Weighted average potential shares of Class B common stock | — | 166 | — |
| Weighted average shares of Class B common stock and potential common shares outstanding— <i>diluted</i> | <u>3,289</u> | <u>3,422</u> | <u>3,213</u> |
| Basic net (loss) income per Class B common share | <u>\$ (0.69)</u> | <u>\$ 0.46</u> | <u>\$ (0.41)</u> |
| Diluted net (loss) income per Class B common share | <u>\$ (0.69)</u> | <u>\$ 0.44</u> | <u>\$ (0.41)</u> |

Potential common shares consist of the shares issuable upon the release of RSUs and PSUs, and the exercise of SARs. The Company's unvested RSUs and PSUs, and unexercised SARs are not considered participating securities as they do not have rights to dividends or dividend equivalents prior to release or exercise.

The following table sets forth the number of potential common shares not included in the calculation of diluted earnings per share because their effects were anti-dilutive:

| | Years Ended January 31, | | |
|---------------|-------------------------|----------------|-------|
| | 2020 | 2019 | 2018 |
| | | (in thousands) | |
| Class A | 2,473 | 325 | 3,236 |
| Class B | 221 | — | 380 |

RECENT ACCOUNTING PRONOUNCEMENTS

With the exception of those discussed below, there have been no recent changes in accounting pronouncements issued by the Financial Accounting Standards Board (FASB) or adopted by the Company during the fiscal year ended January 31, 2020, that are of significance, or potential significance, to the Company.

Recent Accounting Pronouncements Adopted

In February 2016, the FASB issued Accounting Standards Update (ASU) 2016-02, *Leases (Topic 842)*. This pronouncement requires lessees to recognize a liability for lease obligations, which represents the discounted obligation to make future lease payments, and a corresponding right-of-use (ROU) asset on the balance sheet. The Company adopted ASU 2016-02, along with related clarifications and improvements, as of February 1, 2019, using the modified retrospective approach, which allows the Company to apply Accounting Standards Codification (ASC) 840, *Leases*, in the comparative periods presented in the year of adoption. Accordingly, the comparative periods and disclosures have not been restated. The cumulative effect of adoption was recorded as an adjustment to the opening balance sheet in the period of adoption.

Adoption of the new standard resulted in the recording of a non-cash transitional adjustment to ROU lease assets and lease liabilities of approximately \$13.1 million and \$13.9 million, respectively, as of February 1, 2019. The difference between the ROU lease assets and lease liabilities represented existing deferred rent expense and prepaid rent that were derecognized and recorded to retained earnings in the Consolidated Balance Sheets. The adoption of ASU 2016-02 did not materially impact results of operations or cash flows.

Recent Accounting Pronouncements Not Yet Adopted

In December 2019, the FASB issued new guidance which is intended to simplify various aspects to accounting for income taxes by removing certain exceptions to the general principles in Topic 740 for recognizing deferred taxes for investments, performing an intraperiod allocation and calculating income taxes in interim periods. The amendment also clarifies and amends certain areas of existing guidance to reduce complexity and improve consistency in application of Topic 740. The new standard is effective for fiscal years beginning after December 15, 2020. Early adoption is permitted, including adoption in any interim period for which financial statements have not yet been issued. Generally, the topics must be applied prospectively upon adoption, with the exception of certain topics which are required to be applied on a retrospective or modified retrospective basis. The Company is evaluating the impact, if any, of adopting this new accounting guidance on its financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract*, which aligns the accounting for implementation costs incurred in a hosting arrangement that is a service contract with the accounting for implementation costs incurred to develop or obtain internal-use software under ASC 350-40, in order to determine which costs to capitalize and recognize as an asset and which costs to expense. ASU 2018-15 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and can be applied either prospectively to implementation costs incurred after the date of adoption or retrospectively to all arrangements. The Company does not believe adoption of this standard will have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which simplifies the subsequent measurement of goodwill to eliminate Step 2 from the goodwill impairment test. In addition, it eliminates the requirements for any reporting unit with a zero or negative carrying amount to

perform a qualitative assessment and, if that fails that qualitative test, to perform Step 2 of the goodwill impairment test. Therefore, the same impairment assessment applies to all reporting units. ASU 2017-04 will be effective for the Company's fiscal year beginning February 1, 2020. The new guidance is required to be applied on a prospective basis. The Company does not believe adoption of ASU 2017-04 will have a material impact on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost, which includes the Company's accounts receivables, certain financial instruments and contract assets. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss methodology, which will generally result in more timely recognition of credit losses. ASU 2016-13 is effective for annual reporting periods, and interim periods within those years, beginning after December 15, 2019, and 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 does not believe adoption of ASU 2016-13 will have a material impact on its consolidated financial statements.

2. REVENUE

QAD offers its software using the same underlying technology via two models: a traditional on-premises licensing model and a cloud-based subscription model. The on-premises model involves the sale or license of software on a perpetual basis to customers who take possession of the software and install and maintain the software on their own hardware. Under the cloud-based subscription delivery model, QAD provides access to its software on a hosted basis as a service and customers generally do not have the contractual right to take possession of the software.

The Company generates revenue through sales of licenses and maintenance provided to its on-premises customers and through subscriptions of its cloud-based software. QAD offers professional services to both its on-premises and cloud customers to assist them with the design, testing and implementation of its software.

The Company determines revenue recognition 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; and
- Recognition of revenue when, or as, the Company satisfies a performance obligation.

Revenue is presented net of sales, value-added and other taxes collected from customers and remitted to government authorities.

The Company adopted ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)* on the first day of fiscal 2019. Periods prior to the adoption date were not adjusted and continue to be reported in accordance with historical, pre-Topic 606 accounting.

Performance Obligations

A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account under Topic 606. The transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied by transferring the promised good or service to the customer. The Company identifies and tracks the performance obligations at contract inception so that the Company can monitor and account for the performance obligations over the life of the contract.

The Company's contracts which contain multiple performance obligations generally consist of the initial purchase of subscription or licenses and a professional services engagement. License purchases generally have multiple performance obligations as customers purchase maintenance in addition to the licenses. The Company's single performance obligation arrangements are typically maintenance renewals, subscription renewals and services engagements.

For contracts with multiple performance obligations where the contracted price differs from the stand-alone selling price (SSP) for any distinct good or service, the Company may be required to allocate the contract's transaction price to each performance obligation using its best estimate for the SSP. SSP is assessed annually using a historical analysis of contracts with customers executed in the most recently completed fiscal year to determine the range of selling prices applicable to a distinct good or service.

Judgment is required to determine the SSP for each distinct performance obligation. In instances where SSP is not directly observable because the Company does not sell the license, product or service separately, the Company determines the SSP using information that may include market conditions and other observable inputs. In making these judgments, the Company analyzes various factors, including its pricing methodology and consistency, size of the arrangement, length of term, customer demographics and overall market and economic conditions. Based on these results, the estimated SSP is set for each distinct product or service delivered to customers. The Company rarely sells licenses on a stand-alone basis, as the majority of its license sales to customers include first year maintenance with the license purchase. The Company frequently sells subscription, maintenance and services on a stand-alone basis.

Subscription

Subscription revenue is recognized ratably over the initial subscription period committed to by the customer commencing when the cloud environment is made available to the customer. The initial subscription period is typically 24 to 60 months. The Company generally invoices its customers in advance on a quarterly or annual basis and typical payment terms provide that customers make payment within 30 days of invoice.

Software Licenses

Transfer of control for software is considered to have occurred upon electronic delivery of the license key that provides immediate availability of the product to the customer. The Company's typical payment terms tend to vary by region but its standard payment terms are within 30-90 days of invoice.

Maintenance

Revenue from support services and product updates, referred to as maintenance revenue, is recognized ratably over the term of the maintenance period, which in most instances is one year. Software license updates provide customers with rights to unspecified software product updates, maintenance releases and patches released during the term of the support period on a when-and-if available basis. Product support includes Internet access to technical content, as well as Internet and telephone access to technical support personnel. The Company's customers purchase both product support and license updates via the Company's maintenance offering when they acquire new software licenses. In addition, a majority of customers renew their maintenance contracts annually and typical payment terms provide that customers make payment within 30 days of invoice.

Professional Services

Revenue from professional services is typically comprised of implementation, development, training or other consulting services. Consulting services are generally sold on a time-and-materials or fixed fee basis and can include services ranging from software installation to data conversion and building non-complex interfaces to allow the software to operate in integrated environments. The Company recognizes revenue for time-and-materials arrangements as the services are performed. In fixed fee arrangements, revenue is recognized as services are performed as measured by costs incurred to date, compared to total estimated costs to complete the services project. Management applies judgment when estimating project status and the costs necessary to complete the services projects. A number of internal and external factors can affect these estimates, including labor rates, utilization and efficiency variances and specification and testing requirement changes. Services are generally invoiced upon milestones in the contract or upon consumption of the hourly resources and payments are typically due 30 days after invoice.

Indirect Sales Channels

The Company executes arrangements through indirect sales channels via sales agents and distributors who are authorized to market its software products to end users. In arrangements with sales agents, QAD contracts directly with the customer and sales agents are compensated on a commission basis. Distributor arrangements are those in which the resellers are authorized to market and distribute the Company's software products to end users in specified territories and the distributor bears the risk of collection from the end user customer. The Company recognizes revenue from transactions with distributors when the distributor submits a signed agreement and transfer of control has occurred to the distributor in accordance with the five revenue recognition steps noted above. Revenue from distributor transactions is recorded on a net basis (the amount actually received by the Company from the distributor). QAD does not offer rights of return, product rotation or price protection to any of its distributors. During the fiscal year ended January 31, 2020, the Company's revenue from sales agents and distributors was less than 10% of total subscription, license and maintenance revenue.

Disaggregated Revenue

The Company disaggregates revenue from contracts with customers by geography and by the customers' industry within manufacturing, as it believes it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

The Company's revenue by geography is as follows:

| | Years Ended January 31, | | |
|--------------------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | | (in thousands) | |
| North America..... | \$ 151,097 | \$ 162,307 | \$ 141,614 |
| EMEA | 90,885 | 96,989 | 89,693 |
| Asia Pacific | 46,363 | 51,628 | 50,689 |
| Latin America..... | 22,427 | 22,092 | 23,022 |
| Total revenue..... | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ 305,018</u> |

The Company's revenue by industry is as follows:

| | Years Ended January 31, | | |
|----------------------------------------------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | | (in thousands) | |
| Automotive..... | \$ 110,900 | \$ 128,249 | \$ 113,579 |
| Consumer products and food and beverage..... | 46,915 | 53,637 | 47,273 |
| High technology and industrial products..... | 106,807 | 106,658 | 99,990 |
| Life sciences and other | 46,150 | 44,472 | 44,176 |
| Total revenue..... | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ 305,018</u> |

Management Judgments

Due to the complexity of certain contracts, the actual revenue recognition treatment required under Topic 606 for the Company's arrangements may be dependent on contract-specific terms and may vary in some instances.

Revenue is recognized over time for the Company's subscription, maintenance and fixed fee professional services that are separate performance obligations. For the Company's professional services, revenue is recognized over time, generally using costs incurred or hours expended to measure progress. Judgment is required in estimating project status and the costs necessary to complete projects. A number of internal and external factors can affect these estimates, including labor rates, utilization, specification variances and testing requirement changes.

If a group of agreements are entered at or near the same time and so closely related that they are, in effect, part of a single arrangement, such agreements are deemed to be combined as one arrangement for revenue recognition purposes. The Company exercises judgment to evaluate the relevant facts and circumstances in determining whether agreements should be accounted for separately or as a single arrangement. The Company's judgments about whether a group of contracts comprise a single arrangement can affect the allocation of consideration to the distinct performance obligations, which could have an effect on results of operations for the periods involved.

Contract Balances

The timing of revenue recognition may differ from the timing of invoicing to customers and these timing differences result in receivables, contract assets, or contract liabilities (deferred revenue) on the Company's Consolidated Balance Sheets. QAD records a contract asset when the Company has transferred goods or services but does not yet have the right to consideration. QAD records deferred revenue when the Company has received or has the right to receive consideration but has not yet transferred goods or services to the customer. The Company presents the contract asset and liability balance on a net basis at the contract level.

The contract assets indicated below are presented as other current and non-current assets in the Consolidated Balance Sheets. These assets primarily relate to professional services and subscription and consist of the Company's rights to consideration for goods or services transferred but not billed as of January 31, 2020 and 2019. The contract assets are transferred to receivables when the rights to consideration become unconditional, usually upon completion of a milestone.

The Company's contract balances are as follows:

| | As of | |
|---------------------------------------------------------------------------------------|---------------------|---------------------|
| | January 31, 2020 | January 31, 2019 |
| | (In thousands) | |
| Contract assets, short-term (in Prepaid expenses and other current assets, net) | \$ 1,595 | \$ 2,058 |
| Contract assets, long-term (in Other assets, net) | 214 | — |
| Total contract assets | \$ 1,809 | \$ 2,058 |
| Deferred revenue, short-term | \$ 118,413 | \$ 115,253 |
| Deferred revenue, long-term (in Other liabilities) | 2,811 | 1,465 |
| Total deferred revenue | \$ 121,224 | \$ 116,718 |

During the fiscal year ended January 31, 2020, the Company recognized \$117.5 million of revenue that was included in the gross deferred revenue balance at the beginning of the period. All other activity in deferred revenue is due to the timing of invoicing in relation to the timing of revenue recognition.

Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods. Contracted but unsatisfied performance obligations were approximately \$293.4 million as of January 31, 2020, of which the Company expects to recognize approximately \$171.5 million as revenue over the next 12 months and the remainder thereafter. In instances where the timing of revenue recognition differs from the timing of invoicing, QAD has determined that its contracts generally do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing the Company's products and services, and not to facilitate financing arrangements.

Deferred Revenue

The Company typically invoices its customers for subscription and support fees in advance on a quarterly or annual basis, with payment due at the start of the subscription or support term. Unpaid invoice amounts for non-cancelable services starting in future periods are included in accounts receivable and deferred revenue. The portion of deferred revenue that QAD anticipates will be recognized after the succeeding twelve-month period is recorded as non-current deferred revenue, and the remaining portion is recorded as current deferred revenue.

Deferred revenues consisted of the following:

| | As of | |
|-------------------------------------------------------------|---------------------|---------------------|
| | January 31, 2020 | January 31, 2019 |
| | (in thousands) | |
| Deferred maintenance | \$ 69,650 | \$ 77,037 |
| Deferred subscription | 45,702 | 34,020 |
| Deferred professional services | 2,705 | 2,146 |
| Deferred license and other revenue | 356 | 2,050 |
| Deferred revenues, current | 118,413 | 115,253 |
| Deferred revenues, non-current (in Other liabilities) | 2,811 | 1,465 |
| Total deferred revenues | \$ 121,224 | \$ 116,718 |

Practical Expedients and Exemptions

There are several practical expedients and exemptions allowed under Topic 606 that impact timing of revenue recognition and the Company's disclosures. Below is a list of the practical expedients applied by the Company:

- The Company does not evaluate a contract for a significant financing component if payment is expected within one year or less from the transfer of the promised items to the customer.

- The Company generally expenses sales commissions and sales agent fees when incurred when the amortization period would have been one year or less. These costs are recorded within sales and marketing expense in the Consolidated Statement of Operations and Comprehensive (Loss) Income.
- The Company does not disclose the value of unsatisfied performance obligations for contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for services performed (applies to time-and-material engagements).

Costs to Obtain and Fulfill a Contract

The Company's incremental direct costs of obtaining a contract consist of sales commissions and sales agent fees which are deferred and amortized ratably over the term of economic benefit which the Company has determined to be five years. These deferred costs are classified as current or non-current based on the timing of when the Company expects to recognize the expense. The current and non-current portions of deferred commissions are included in prepaid expenses and other current assets, net and other assets, net, respectively, in the Company's Consolidated Balance Sheets. At January 31, 2020 and January 31, 2019, the Company had \$12.3 million and \$11.0 million, respectively, of deferred commissions and sales agent fees. For the fiscal years ended January 31, 2020 and 2019, \$3.9 million and \$3.6 million, respectively, of amortization expense related to deferred commissions and sales agent fees was recorded in sales and marketing expense in the Company's Consolidated Statement of Operations and Comprehensive (Loss) Income.

Costs to fulfill a contract, which are incurred upon initiation of certain services contracts and are related to initial customer setup, are included in prepaid expenses and other current assets, net and other assets, net in the Company's Consolidated Balance Sheets. At January 31, 2020 and January 31, 2019 the Company had deferred setup costs of \$1.4 million and \$1.5 million, respectively. These costs are amortized over the term of economic benefit which the Company has determined to be five years. During the fiscal years ended January 31, 2020 and 2019, \$0.6 million and \$0.5 million, respectively, of amortization expense related to deferred setup costs was recorded in cost of subscription in the Company's Consolidated Statement of Operations and Comprehensive (Loss) Income.

Recoverability of these costs is subject to various business risks. Quarterly, the Company compares the carrying value of these assets with the undiscounted future cash flows expected to be generated by them to determine if there is impairment. If impaired, these assets are reduced to an estimated fair value on a discounted cash flow basis. No impairment losses were recognized during the twelve months ended January 31, 2020 and 2019.

3. FAIR VALUE MEASUREMENTS

When determining fair value, the Company uses a three-tier value hierarchy which prioritizes the inputs used in measuring fair value. Whenever possible, the Company uses observable market data. The Company relies on unobservable inputs only when observable market data is not available. Classification within the hierarchy is determined based on the lowest level input that is significant to the fair value measurement. The assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

- Level 1 - The assets are recorded at fair value based upon quoted market prices.
- Level 2 - The asset or liability related to the interest rate swap is recorded at fair value based upon a valuation model that uses relevant observable market inputs at quoted intervals, such as forward yield curves.

The following table sets forth the financial assets and liability, measured at fair value, as of January 31, 2020 and January 31, 2019:

| Fair value measurement at reporting date using | | | |
|--------------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------|
| | Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
| | | (in thousands) | |
| As of January 31, 2020 | | | |
| Money market mutual funds..... | \$ 107,319 | | |
| Certificates of deposit..... | \$ 14,917 | | |
| Liability related to the interest rate swap..... | | \$ (232) | |
| As of January 31, 2019 | | | |
| Money market mutual funds..... | \$ 105,205 | | |
| Certificates of deposit..... | \$ 11,578 | | |
| Short-term investments..... | \$ 1,200 | | |
| Asset related to the interest rate swap | | \$ 136 | |

Money market mutual funds and certificates of deposit are classified as part of “Cash and equivalents” in the accompanying Consolidated Balance Sheets. The amount of cash and equivalents deposited with commercial banks was \$14.5 million and \$22.6 million at January 31, 2020 and January 31, 2019, respectively.

The Company’s note payable bears a variable market interest rate commensurate with the Company’s credit standing. Therefore, the carrying amount outstanding under the note payable reasonably approximates fair value based on Level 2 inputs.

There have been no transfers between fair value measurements levels during the twelve months ended January 31, 2020.

Derivative Instruments

The Company entered into an interest rate swap in May 2012 to mitigate the exposure to the variability of one month LIBOR for its floating rate debt described in Note 8 “Debt” within these Notes to Consolidated Financial Statements. The fair value of the interest rate swap is reflected as an asset or liability in the Consolidated Balance Sheets and the change in fair value is reported in “Other (income) expense, net” in the Consolidated Statements of Operations and Comprehensive (Loss) Income. The fair value of the interest rate swap is estimated as the net present value of projected cash flows based upon forward interest rates at the balance sheet date.

The fair values of the derivative instrument at January 31, 2020 and January 31, 2019 were as follows (in thousands):

| | | (Liability) Asset | |
|---------------------------|------------------------------------|---------------------|---------------------|
| | | Fair Value | |
| Balance Sheet Location | | January 31, 2020 | January 31, 2019 |
| Derivative instrument: | | | |
| Interest rate swap | Other (liabilities) assets, net | \$ (232) | \$ 136 |
| Total | | \$ (232) | \$ 136 |

The change in fair value of the interest rate swap recognized in the Consolidated Statement of Operations and Comprehensive (Loss) Income for the twelve months ended January 31, 2020, 2019 and 2018 was \$(368,000), \$(51,000) and \$377,000, respectively.

4. INCOME TAXES

The domestic and foreign components of income before provision for (benefit from) income taxes consisted of the following:

| | Years Ended January 31, | | |
|----------------------------------------------------------|-------------------------|------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Domestic net income (loss) before income taxes | \$ 2,963 | \$ 6,562 | \$ (4,793) |
| Foreign net (loss) income before income taxes | (6,567) | 5,355 | 585 |
| Consolidated net (loss) income before income taxes | <u>\$ (3,604)</u> | <u>\$ 11,917</u> | <u>\$ (4,208)</u> |

Income tax expense is summarized as follows:

| | Years Ended January 31, | | |
|--------------------|-------------------------|-----------------|-----------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Current: | | | |
| U.S. federal | \$ 471 | \$ (829) | \$ 2,862 |
| State | 130 | (13) | 38 |
| Foreign | 2,149 | 3,784 | 2,433 |
| Subtotal | <u>2,750</u> | <u>2,942</u> | <u>5,333</u> |
| Deferred: | | | |
| U.S. federal | 25 | 79 | (519) |
| State | (107) | (30) | 19 |
| Foreign | 9,677 | (1,502) | 24 |
| Subtotal | <u>9,595</u> | <u>(1,453)</u> | <u>(476)</u> |
| Total | <u>\$ 12,345</u> | <u>\$ 1,489</u> | <u>\$ 4,857</u> |

Actual income tax expense differs from that obtained by applying the statutory federal income tax rate to income before income taxes as follows:

| | Years Ended January 31, | | |
|-------------------------------------------------------------|-------------------------|-----------------|-----------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Computed expected tax (benefit) expense | \$ (757) | \$ 2,503 | \$ (1,431) |
| State income taxes, net of federal income tax expense | (581) | 96 | (157) |
| Incremental tax expense from foreign operations | 1,256 | 715 | 923 |
| Equity compensation | (4,198) | (2,916) | (1,004) |
| Foreign withholding taxes | 1,103 | 1,089 | 794 |
| Net increase in valuation allowance | 16,179 | 3,224 | 5,448 |
| Net change in uncertain tax positions | 3 | (71) | (81) |
| Non-deductible expenses | 218 | 1,149 | (407) |
| Benefit of tax credits | (1,719) | (3,483) | (1,766) |
| Subpart F income | 27 | 101 | 302 |
| U.S. Tax Reform (the "Tax Act") | — | (1,312) | 1,951 |
| Rate change impact | 867 | 124 | 187 |
| Other | (53) | 270 | 98 |
| Total | <u>\$ 12,345</u> | <u>\$ 1,489</u> | <u>\$ 4,857</u> |

On December 22, 2017, the United States signed into law the Tax Cuts and Job Act (the Tax Act), which imposes a repatriation tax on accumulated earnings of foreign subsidiaries, implements a territorial tax system together with a current tax on foreign earnings and lowers the general U.S. corporate income tax rate to 21%, which was applied to fiscal years 2020 and 2019. A U.S. corporate income tax rate of 35% was used for fiscal 2018.

When calculating QAD's income tax expense for fiscal 2020, the Company considered the Tax Act. The Company calculated an estimate for global intangible low-tax income (GILTI) in the Company's tax expense based on the final GILTI regulations released on June 14, 2019 by the U.S. Department of Treasury. These regulations provide computational,

definitional, and anti-avoidance rule guidance relating to the determination of a U.S. shareholder's GILTI inclusion. In fiscal years 2020 and 2019, tax expense was not impacted by GILTI since the Company experienced losses overseas.

The Company has elected to treat the deferred taxes related to GILTI provisions as a current-period expense when incurred (the period cost method).

The Company's effective tax rate is affected by the relative amount of its foreign earnings. The Company's foreign earnings are primarily generated from the following countries: China, India and Mexico. These countries have higher statutory and effective tax rates than the U.S. The Company is not able to realize related benefits from operating in Ireland due to a valuation allowance placed against its Irish principal.

As of January 31, 2020, the Company continues to maintain its permanent reinvestment assertion under APB 23 for all of its foreign subsidiaries as it relates to withholding taxes, state taxes and currency translation. These permanently reinvested earnings are approximately \$92 million at January 31, 2020. It is not practicable for the Company to determine the amount of the related unrecognized deferred income tax liability.

Deferred Income Taxes

Deferred income taxes reflect the net tax effect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Significant components of the Company's deferred tax assets and liabilities are as follows:

| | January 31, | |
|----------------------------------------------------------------------------|-----------------------|------------------|
| | 2020 | 2019 |
| | (in thousands) | |
| Deferred tax assets: | | |
| Allowance for doubtful accounts and sales adjustments..... | \$ 600 | \$ 520 |
| Accrued vacation | 1,499 | 1,568 |
| Tax credits | 22,077 | 20,908 |
| Deferred revenue | 3,136 | 2,849 |
| ASC 842 lease liabilities..... | 4,142 | — |
| Net operating loss carry forwards..... | 15,475 | 10,597 |
| Accrued expenses – other | 2,038 | 1,802 |
| Other comprehensive income | 1,603 | 1,189 |
| Section 263(a) interest capitalization..... | 190 | 198 |
| Intellectual property..... | 6,250 | 7,917 |
| Equity compensation | 3,579 | 4,626 |
| Carryforward of Irish amortization..... | 3,614 | 1,630 |
| Other | 1,767 | 2,345 |
| Total deferred tax assets..... | 65,970 | 56,149 |
| Less valuation allowance | (50,972) | (34,898) |
| Less netting of unrecognized tax benefits against deferred tax assets..... | (973) | (886) |
| Deferred tax assets, net of valuation allowance | <u>\$ 14,025</u> | <u>\$ 20,365</u> |
| Deferred tax liabilities: | | |
| Depreciation and amortization..... | (851) | (804) |
| Topic 606: capitalized commissions and cloud costs | (3,054) | (2,891) |
| ASC 842 right of use assets | (3,931) | — |
| Other | (355) | (498) |
| Total deferred tax liabilities | <u>(8,191)</u> | <u>(4,193)</u> |
| Total net deferred tax assets | <u>\$ 5,834</u> | <u>\$ 16,172</u> |

The Company reviews its net deferred tax assets by entity at each balance sheet date to determine whether a valuation allowance is necessary based on the more-likely-than-not standard. During fiscal year 2020, management considered all available evidence, both positive and negative, to determine whether, based on the weight of that evidence, a valuation allowance was needed. Management assessed the transfer pricing methodology, the historical profits, the economics of the country in which the entity operates, the current and future customer base, the type and character of the deferred tax asset and any other current and relevant information by entity to draw its conclusion.

In fiscal year 2020, the Company continued to apply a valuation allowance against its U.S. federal and state net deferred tax assets due to a U.S. three-year cumulative loss and future earmarked investment in research and development. When the Company's operating performance improves on a sustained basis, the conclusion regarding the need for a valuation allowance may change, resulting in the reversal of some or all of the valuation allowance in the future.

The Company reviewed the net deferred tax assets of its wholly-owned Irish subsidiary (the Irish principal). Based on the weight of evidence both positive and negative, it was determined that the negative evidence, which consisted of a three-year cumulative loss, a fiscal 2021 projected loss, and future earmarked investment outweighed the positive evidence. Management concluded that the weight of this negative evidence warranted placing a full valuation allowance on the Irish principal's net deferred tax assets during the second quarter of fiscal 2020.

The valuation allowance on the Company's Belgium entity was released after several years of consecutive profits and management's conclusion that the entity is "more-likely-than-not" able to utilize the remaining net operating losses within the foreseeable future.

A valuation allowance has been established for select foreign jurisdictions along with U.S. federal and state net deferred tax assets. The following table discloses the Company's valuation allowance by entity (in millions):

| Jurisdiction | January 31, 2020 | January 31, 2019 |
|---------------------------------|-----------------------------|-----------------------------|
| U.S. federal and state..... | \$ 30.3 | \$ 24.7 |
| Irish principal | 11.6 | - |
| Brazil..... | 5.7 | 5.2 |
| Germany..... | 2.6 | 2.9 |
| Hong Kong..... | 0.6 | 1.2 |
| South Africa..... | 0.2 | - |
| Belgium..... | - | 0.9 |
| Total valuation allowance | <u>\$ 51.0</u> | <u>\$ 34.9</u> |

At January 31, 2020 and 2019, the worldwide valuation allowance attributable to deferred tax assets was \$51.0 million and \$34.9 million, respectively.

The Company has gross net operating loss carryforwards of \$67.5 million and tax credit carryforwards of \$22.1 million as of January 31, 2020. The majority of the Company's net operating loss carryforwards do not expire. The Company's foreign tax credits will begin to expire in fiscal year 2028. The Company has \$7.0 million of U.S. and \$8.9 million of California R&D credits that have been valued. The Company has \$14,000 of U.S. R&D tax credit that will expire on October 2020. It is unlikely that these credits will be utilized before expiration. Australian and California R&D tax credits do not expire.

Unrecognized Tax Benefits and Other Considerations

During the fiscal year ended January 31, 2020, the Company increased its reserves for uncertain tax positions by \$3,000. Interest and penalties on accrued but unpaid taxes are classified in the Consolidated Statements of Operations and Comprehensive (Loss) Income as income tax expense. The liability for unrecognized tax benefits that may be recognized in the next twelve months is classified as short-term in the Company's Consolidated Balance Sheets while the remainder is classified as long-term.

The following table reconciles the gross amounts of unrecognized tax benefits at the beginning and end of the period:

| | Years Ended January 31, | |
|-----------------------------------------------------------------------|--------------------------------|-----------------|
| | 2020 | 2019 |
| | (in thousands) | |
| Unrecognized tax benefits at beginning of the year | \$ 1,168 | \$ 1,662 |
| Decreases as a result of tax positions taken in a prior period | — | (26) |
| Increases as a result of tax positions taken in the prior period..... | 143 | — |
| Reduction as a result of a lapse of the statute of limitations | (37) | (44) |
| Decreases as a result of settlements with taxing authorities | (103) | (424) |
| Unrecognized tax benefit at end of year | <u>\$ 1,171</u> | <u>\$ 1,168</u> |

All of the unrecognized tax benefits included in the Consolidated Balance Sheet at January 31, 2020 would impact the effective tax rate on income (loss) from continuing operations, if recognized.

The total amount of interest recognized in the Consolidated Statement of Operations and Comprehensive (Loss) Income for unpaid taxes was (\$20,000) for the year ended January 31, 2020. The total amount of interest and penalties accrued in the Consolidated Balance Sheet at January 31, 2020 was \$0.1 million.

The Company files U.S. federal, state, and foreign tax returns that are subject to audit by various tax authorities. The Company is currently under audit in:

- India for fiscal years ended March 31, 2010, 2013 and 2018
- Germany for fiscal years ended January 31, 2015, 2016 and 2017

During fiscal 2020, the Company closed the following audits with immaterial or no adjustments:

- Tennessee for fiscal years ended January 31, 2014, 2015, 2016 and 2017
- India for fiscal years ended March 31, 2011 and 2014
- Switzerland for fiscal years ended January 31, 2014, 2015, 2016, 2017 and 2018
- Thailand for fiscal year ended January 31, 2017
- Netherlands for fiscal year ended January 31, 2016

The Company files U.S. federal, state, and foreign income tax returns in jurisdictions with varying statute of limitations. The years that may be subject to examination will vary by jurisdiction. Below is a list of our material jurisdictions and the years open for audit as of January 31, 2020:

| Jurisdiction | Years Open for Audit |
|---------------------|----------------------------------|
| U.S. federal..... | Fiscal year 2017 and beyond |
| California..... | Fiscal year 2016 and beyond |
| Michigan | Fiscal year 2016 and beyond |
| New Jersey | Fiscal year 2016 and beyond |
| Australia | Fiscal year 2016 and beyond |
| France..... | Fiscal year 2017 and beyond |
| India..... | Fiscal years 2010, 2013 and 2018 |
| Ireland | Fiscal year 2016 and beyond |
| United Kingdom..... | Fiscal year 2019 and beyond |
| China | Calendar year 2015 and beyond |
| Mexico..... | Calendar year 2015 and beyond |

5. STOCKHOLDERS' EQUITY

Common Stock

The Company has two classes of common stock. Each share of Class B Common Stock entitles the holder to one vote and each share of Class A Common Stock entitles the holder to 1/20th of one vote. On all matters, the Class A Common Stock and the Class B Common Stock will vote as a single class, except as otherwise required by applicable law or the articles of incorporation. Neither the Class A Common Stock nor the Class B Common Stock are convertible into the other, unless either or both classes becomes subject to exclusion from the principal national securities exchange on which such securities are traded, in which case all outstanding shares of Class A Common Stock may be converted into shares of Class B Common Stock on a share-for-share basis by resolution of the Board of Directors. There are no restrictions on the transferability of either class.

The amount of any dividend payable in cash or non-cash property of the Company (other than a dividend payable solely in the Company's capital stock) with respect to each share of Class A Common Stock is equal to 120% of the value of any such dividend payable with respect to a share of Class B Common Stock, except for dividends declared for the purpose of distributing all or some of the proceeds received by the Company from any transaction determined by the Board to be a material transaction not in the ordinary course of business or for the purpose of effecting a spin-off of a subsidiary of the Company (in either case, such dividend will be paid ratably, on a per share basis, to all holders of Common Stock).

Dividends

The following table sets forth the dividends declared and paid by the Company during fiscal 2020:

| Declaration Date | Record Date | Payable | Dividend Class A | Dividend Class B | (in thousands) |
|------------------|-------------|-----------|---------------------|---------------------|----------------|
| 12/16/2019 | 1/2/2020 | 1/9/2020 | \$ 0.072 | \$ 0.06 | \$ 1,430 |
| 9/4/2019 | 9/18/2019 | 9/25/2019 | \$ 0.072 | \$ 0.06 | \$ 1,426 |
| 6/24/2019 | 7/10/2019 | 7/17/2019 | \$ 0.072 | \$ 0.06 | \$ 1,387 |
| 4/9/2019 | 4/23/2019 | 5/3/2019 | \$ 0.072 | \$ 0.06 | \$ 1,374 |

6. STOCK-BASED COMPENSATION

Stock Plans

On June 14, 2016, the stockholders approved the QAD Inc. 2016 Stock Incentive Program (2016 Program). The 2016 Program allows for equity awards in the form of incentive stock options, non-statutory stock options, restricted shares, rights to purchase stock, stock appreciation rights (SARs) and other stock rights. The stockholders authorized a maximum of 4,000,000 shares to be issued under the 2016 Program. Prior to July 1, 2016, stock awards were issued under the QAD Inc. 2006 Stock Incentive Program. As of January 31, 2020, 2,762,000 Class A Common Shares were available for issuance.

The Company issues restricted stock units (RSUs) to employees under the 2016 Program, which are released 25% after each year of service for four years and are contingent upon employment with the Company on the release date.

The Company issues performance stock units (PSUs) to certain executive employees under the 2016 Program. PSUs are released 1/3 after each year of service for three years and are contingent upon employment with the Company and achievement of pre-determined performance objectives. To determine the anticipated achievement of the performance objectives, management must make assumptions regarding the likelihood of the Company meeting those targets. The number of PSUs that vest will be predicated on the Company achieving performance objectives during the measurement period subsequent to the date of grant. Depending on the financial performance levels achieved, a percentage of the PSUs (0% to 200% of the target award) will vest to the grantees of those stock units. There is no guarantee that the Company's outstanding PSUs will vest in whole or in part.

In prior years, the Company has issued equity awards in the form of stock-settled SARs to the President of the Company. A SAR is a contractual right to receive value tied to the post-grant appreciation of the underlying stock. Although the Company has the ability to grant stock-settled or cash-settled SARs, the Company has only granted stock-settled SARs. Upon vesting, a holder of a stock-settled SAR receives shares in the Company's common stock equal to the intrinsic value of the SAR at time of exercise. Under the 2016 Program and 2006 Program, SARs have been granted for a term of eight years. They vest 25% after each year of service for four years and are contingent upon employment with the Company on the vesting date. Economically, a stock-settled SAR provides the same compensation value as a stock option, but the employee is not required to pay an exercise price upon exercise of the SAR. Stock compensation expense, as required under ASC 718, is the same for stock-settled SARs and stock options.

Equity awards are also issued to non-employee Board members that are newly-appointed or reelected at the Annual Meeting of Stockholders. They are granted Class A shares as stock payments that are fully vested on the date of grant. Equity awards to non-employee Board members are limited to \$250,000 per year, as determined for the Company's financial accounting purposes as of the date of grant.

Under the 2016 Program, officers, directors, employees, consultants and other independent contractors or agents of the Company or subsidiaries of the Company who are responsible for or contribute to the management, growth or profitability of its business are eligible for selection by the program administrators to participate. However, incentive stock options granted under the 2016 Program may only be granted to a person who is an employee of the Company or one of its subsidiaries.

Stock-Based Compensation

The following table sets forth reported stock compensation expense included in the Company's Consolidated Statements of Operations and Comprehensive (Loss) Income for the fiscal years ended January 31, 2020, 2019 and 2018:

| | Years Ended January 31, | | |
|----------------------------------------------|-------------------------|------------------|-----------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Stock-based compensation expense: | | | |
| Cost of subscription | \$ 315 | \$ 252 | \$ 161 |
| Cost of maintenance revenue | 540 | 497 | 384 |
| Cost of professional services | 1,456 | 1,219 | 1,085 |
| Sales and marketing | 2,057 | 2,111 | 1,510 |
| Research and development | 1,863 | 1,620 | 1,226 |
| General and administrative | 5,123 | 4,423 | 4,558 |
| Total stock-based compensation expense | <u>\$ 11,354</u> | <u>\$ 10,122</u> | <u>\$ 8,924</u> |

RSU Information

The following table summarizes the activity for RSUs for the fiscal years ended January 31, 2020, 2019 and 2018:

| | RSUs (in thousands) | Weighted Average Grant Date Fair Value |
|--------------------------------------------|------------------------|-------------------------------------------------|
| Restricted stock at January 31, 2017 | 623 | \$ 20.56 |
| Granted | 295 | 30.69 |
| Released (1) | (245) | 20.48 |
| Forfeited | (20) | 22.36 |
| Restricted stock at January 31, 2018 | 653 | \$ 25.10 |
| Granted | 300 | 51.70 |
| Released (1) | (263) | 25.80 |
| Forfeited | (27) | 30.63 |
| Restricted stock at January 31, 2019 | 663 | \$ 36.64 |
| Granted | 281 | 40.43 |
| Released (1) | (267) | 32.71 |
| Forfeited | (50) | 38.51 |
| Restricted stock at January 31, 2020 | <u>627</u> | <u>\$ 39.86</u> |

(1) The number of RSUs released includes shares withheld on behalf of employees to satisfy minimum statutory tax withholding requirements. During the fiscal years ended January 31, 2020, 2019 and 2018, the Company withheld 82,000 shares, 81,000 shares and 74,000 shares, respectively, for payment of these taxes. The value of the withheld shares for the fiscal years ended January 31, 2020, 2019 and 2018 were \$3.5 million, \$4.3 million and \$2.4 million, respectively.

Total unrecognized compensation cost related to RSUs was approximately \$19.6 million as of January 31, 2020. This cost is expected to be recognized over a period of approximately 2.7 years.

PSU Information

The estimated fair value of PSUs was calculated based on the closing price of the Company's common stock on the date of grant, reduced by the present value of dividends foregone during the vesting period. The vesting is subject to attainment of specified performance criteria. Each fiscal quarter, QAD estimates the probability of the achievement of the performance goal and recognizes any related stock-based compensation expense using the graded-vesting method. The amount of stock-based compensation expense recognized in any one period can vary based on the attainment or expected attainment of the performance goal. If the performance goal is not met, no compensation expense is recognized and any previously recognized compensation expense is reversed.

Stock-based compensation expense related to performance-based restricted stock grants for fiscal year 2020 was \$0.8 million.

The following table summarizes the activity for PSUs for the fiscal year ended January 31, 2020:

| | PSUs (in thousands) | Weighted Average Grant Date Fair Value |
|---------------------------------------------------|--------------------------------|-----------------------------------------------------------|
| Performance stock units at January 31, 2019 | — | \$ — |
| Granted | 93 | 39.82 |
| Released | — | — |
| Forfeited | (3) | 39.82 |
| Performance stock units at January 31, 2020 | <u>90</u> | <u>\$ 39.82</u> |

Total unrecognized compensation cost related to PSUs was approximately \$1.3 million as of January 31, 2020. This cost is expected to be recognized over a period of approximately 1.6 years.

SAR Information

The weighted average assumptions used to value SARs are shown in the following table.

| | Years Ended January 31, | |
|-------------------------------|--------------------------------|-------------|
| | 2019 | 2018 |
| Expected life in years | 5.50 | 5.50 |
| Risk free interest rate | 2.80% | 1.82% |
| Volatility | 31% | 33% |
| Dividend rate | 0.54% | 0.91% |

The following table summarizes the activity for outstanding SARs for the fiscal years ended January 31, 2020, 2019 and 2018:

| | Options/ SARs (in thousands) | Weighted Average Exercise Price per Share | Weighted Average Remaining Contractual Term (years) | Aggregate Intrinsic Value (in thousands) |
|--------------------------------------------------|-------------------------------------------------|------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Outstanding at January 31, 2017 | 2,793 | \$ 15.51 | | |
| Granted | 380 | 31.65 | | |
| Exercised | (139) | 10.52 | | |
| Expired | (10) | 9.74 | | |
| Outstanding at January 31, 2018 | 3,024 | \$ 17.78 | | |
| Granted | 380 | 53.50 | | |
| Exercised | (390) | 9.43 | | |
| Expired | (5) | 9.17 | | |
| Forfeited | (476) | 37.14 | | |
| Outstanding at January 31, 2019 | 2,533 | \$ 20.81 | | |
| Granted | — | — | | |
| Exercised | (1,184) | 16.19 | | |
| Expired | — | — | | |
| Forfeited | — | — | | |
| Outstanding at January 31, 2020 | <u>1,349</u> | <u>\$ 24.86</u> | <u>3.3</u> | <u>\$ 34,018</u> |
| Vested and exercisable at January 31, 2020 | <u>1,064</u> | <u>\$ 20.70</u> | <u>2.7</u> | <u>\$ 30,691</u> |

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (the aggregate difference between the closing stock price of the Company's common stock based on the last trading day as of January 31, 2020 and the exercise price for in-the-money SARs) that would have been received by the holders if all SARs had been exercised on

January 31, 2020. The total intrinsic value of SARs exercised in the years ended January 31, 2020, 2019 and 2018 was \$26.5 million, \$12.4 million and \$3.0 million, respectively. The weighted average grant date fair value per share of SARs granted in the years ended January 31, 2019 and 2018 was \$16.99 and \$9.59, respectively. No SARs were granted in fiscal 2020.

The number of SARs exercised includes shares withheld on behalf of employees to satisfy minimum statutory tax withholding requirements. During the fiscal years ended January 31, 2020, 2019 and 2018, the Company withheld 56,000, 104,000 and 31,000 shares for payment of these taxes. The value of the withheld shares for the fiscal years ended January 31, 2020, 2019 and 2018 were \$2.7 million, \$4.4 million and \$1.0 million, respectively.

At January 31, 2020, there was approximately \$2.6 million of total unrecognized compensation cost related to unvested SARs. This cost is expected to be recognized over a weighted average period of approximately 2.1 years.

7. OTHER BALANCE SHEET ACCOUNTS

| | January 31, | |
|--------------------------------------------------------------|------------------|------------------|
| | 2020 | 2019 |
| | (in thousands) | |
| Prepaid expenses and other current assets, net | | |
| Deferred cost of revenues | \$ 8,096 | \$ 8,007 |
| Prepaid expenses | 6,140 | 6,597 |
| Capitalized costs to obtain a contract, net | 3,961 | 3,502 |
| Assets held for sale | 1,634 | - |
| Contract assets | 1,595 | 2,058 |
| VAT receivable | 1,174 | 229 |
| Capitalized costs to fulfill a contract, net | 543 | 521 |
| Income tax receivable, net of payables | 963 | 255 |
| Other | 846 | 981 |
| | <u>\$ 24,952</u> | <u>\$ 22,150</u> |
| Other assets, net | | |
| Long-term capitalized costs to obtain a contract, net | \$ 8,371 | \$ 7,520 |
| Long-term deposits and prepaid expenses | 2,462 | 3,061 |
| Other intangible assets, net | 985 | 1,233 |
| Long-term capitalized costs to fulfill a contract, net | 886 | 934 |
| Fair value of interest rate swap | - | 136 |
| Other long-term assets | 303 | 136 |
| | <u>\$ 13,007</u> | <u>\$ 13,020</u> |
| Accounts payable | | |
| Trade payables | \$ 6,155 | \$ 6,544 |
| VAT payable | 3,685 | 3,358 |
| | <u>\$ 9,840</u> | <u>\$ 9,902</u> |
| Other current liabilities | | |
| Accrued commissions and bonus | \$ 15,023 | \$ 15,464 |
| Accrued compensated absences | 8,377 | 9,130 |
| Other accrued payroll | 6,795 | 5,251 |
| Accrued professional fees | 2,628 | 2,729 |
| Accrued travel | 1,264 | 1,696 |
| Accrued contract labor | 934 | 1,975 |
| Other current liabilities | 4,879 | 4,103 |
| | <u>\$ 39,900</u> | <u>\$ 40,348</u> |
| Other liabilities | | |
| Long-term deferred revenue | \$ 2,811 | \$ 1,465 |
| Accrued termination benefits | 2,600 | 1,946 |
| Lease restoration obligations | 881 | 834 |
| Fair value of interest rate swap | 232 | - |
| Long-term tax contingency reserve | 198 | 282 |
| Other | 37 | 574 |
| | <u>\$ 6,759</u> | <u>\$ 5,101</u> |

8. DEBT

| | January 31, | |
|----------------------------------------|------------------|------------------|
| | 2020 | 2019 |
| | (in thousands) | |
| Note payable..... | \$ 12,868 | \$ 13,358 |
| Less current maturities | (503) | (487) |
| Less loan origination costs, net | (24) | (35) |
| Long-term debt..... | <u>\$ 12,341</u> | <u>\$ 12,836</u> |

Effective May 30, 2012, QAD Ortega Hill, LLC, a consolidated entity of QAD Inc., entered into a variable rate credit agreement (the “2012 Mortgage”) with Mechanics Bank (formerly Rabobank, N.A.), to refinance a pre-existing mortgage. The 2012 Mortgage has an original principal balance of \$16.1 million and bears interest at the one month LIBOR rate plus 2.25%. One month LIBOR was 1.67% at January 31, 2020. The 2012 Mortgage matures in June 2022 and is secured by the Company’s headquarters located in Santa Barbara, California. In conjunction with the 2012 Mortgage, QAD Ortega Hill, LLC entered into an interest rate swap with Mechanics Bank. The swap agreement has an initial notional amount of \$16.1 million and a schedule matching that of the underlying loan that synthetically fixes the interest rate on the debt at 4.31% for the entire term of the 2012 Mortgage. The terms of the 2012 Mortgage provide for QAD Ortega Hill, LLC to make net monthly payments of \$88,100 consisting of principal and interest and one final payment of \$11.7 million. The unpaid balance as of January 31, 2020 was \$12.9 million.

9. LEASES

The Company leases certain office space, office equipment and autos with remaining lease terms from one month to eleven years under leases classified as operating or finance. The Company has options to terminate some of its leases early. The lease term represents the period up to the early termination date unless it is reasonably certain that QAD will not exercise the early termination option. For certain leases, the Company has options to extend the lease term for additional periods ranging from one year to ten years.

Supplemental balance sheet information related to leases was as follows (in thousands):

| | January 31, 2020 |
|-------------------------------|---------------------|
| Assets | |
| Operating..... | \$ 18,154 |
| Finance | 175 |
| Total lease assets, net..... | <u>\$ 18,329</u> |
| Liabilities | |
| Current | |
| Operating..... | \$ 4,307 |
| Finance | 64 |
| Noncurrent | |
| Operating..... | 14,524 |
| Finance | 88 |
| Total lease liabilities | <u>\$ 18,983</u> |

The components of lease costs were as follows (in thousands):

| | Twelve Months Ended January 31, 2020 |
|-----------------------------|---------------------------------------------------------|
| Operating lease cost | \$ 5,963 |
| Finance lease cost | 58 |
| Variable lease cost | 1,447 |
| Short-term lease cost | 229 |
| Net lease cost | <u>\$ 7,697</u> |

Lease term and discount rate were as follows:

| | January 31, 2020 |
|--------------------------------------------------|-----------------------------|
| Weighted-average remaining lease term (in years) | |
| All leases | 5.9 |
| Weighted-average discount rate | |
| All leases | 5.79% |

Supplemental disclosures of cash flow information related to leases were as follows (in thousands):

| | Twelve Months Ended January 31, 2020 |
|------------------------------------------------------------------------------|---------------------------------------------------------|
| Cash flows related to lease liabilities | |
| Operating cash flows related to operating leases | \$ (6,077) |
| Financing cash flows related to finance leases | (47) |
| Total cash flows related to lease liabilities | <u>\$ (6,124)</u> |
| Non-cash items | |
| Leased assets obtained in exchange for new operating lease liabilities | \$ 10,419 |
| Leased assets obtained in exchange for new finance lease liabilities | 222 |
| Total non-cash items | <u>\$ 10,641</u> |

Maturities of lease liabilities were as follows as of January 31, 2020 (in millions):

| | |
|------------------------------------------|----------------|
| Within 1 year | \$ 5.2 |
| 2 years | 4.0 |
| 3 years | 3.2 |
| 4 years | 2.6 |
| 5 years | 2.2 |
| Thereafter | 5.5 |
| Total lease payments | <u>\$ 22.7</u> |
| Less: Imputed interest | (3.7) |
| Present value of lease liabilities | <u>\$ 19.0</u> |

As of January 31, 2019 future minimum lease payments, as defined under the previous lease accounting guidance of ASC Topic 840, under non-cancelable operating leases for the following five fiscal years and thereafter were as follows (in millions):

| | | |
|------------------|----|-------------|
| 2020 | \$ | 5.6 |
| 2021 | | 4.6 |
| 2022 | | 2.8 |
| 2023 | | 1.8 |
| 2024 | | 1.5 |
| Thereafter | | 2.8 |
| Total | \$ | <u>19.1</u> |

The Company is a lessor for certain office space owned by the Company and leased to others under non-cancelable leases with initial terms ranging from three months to one year. These lease agreements provide for a fixed base rent and automatically renew for periods from three months to one year unless terminated. All of the Company's leased office space are considered operating leases. There are no rights to purchase the premises and no residual value guarantees. For the fiscal year 2020, the Company received \$1.0 million of lease income from company-owned locations.

10. ACCUMULATED OTHER COMPREHENSIVE LOSS

The components of accumulated other comprehensive loss were as follows:

| | Foreign Currency Translation Adjustments |
|----------------------------------------------------------------------|-------------------------------------------------------------|
| | (in thousands) |
| Balance as of January 31, 2018 | \$ (6,828) |
| Other comprehensive loss before reclassifications | (833) |
| Amounts reclassified from accumulated other comprehensive loss | — |
| Net current period other comprehensive loss | (833) |
| Balance as of January 31, 2019 | \$ (7,661) |
| Other comprehensive loss before reclassifications | (684) |
| Amounts reclassified from accumulated other comprehensive loss | — |
| Net current period other comprehensive loss | (684) |
| Balance as of January 31, 2020 | \$ <u>(8,345)</u> |

During fiscal 2020 and fiscal 2019 there were no reclassifications from accumulated other comprehensive loss.

11. EMPLOYEE BENEFIT PLANS

The Company has a defined contribution 401(k) plan which is available to U.S. employees after 30 days of employment. Employees may contribute up to the maximum allowable by the Internal Revenue Code. The Company voluntarily matches 75% of the employees' contributions up to the first four percent of the employee's eligible compensation. In addition, the Company can make additional contributions at the discretion of the board of directors. Participants are immediately vested in their employee contributions. Employer contributions vest 25% per year over four years. The Company's contributions for fiscal years 2020, 2019 and 2018 were \$2.1 million, \$2.2 million and \$2.2 million, respectively.

Various QAD foreign subsidiaries also contribute to defined contribution pension plans. Employer contributions in these plans are generally based on employee salary and range from 2% to 20%. These plans are funded at various times throughout the year according to plan provisions, with aggregate employer contributions of \$4.7 million for fiscal 2020, \$5.3 million for fiscal 2019 and \$4.4 million for fiscal 2018.

12. COMMITMENTS AND CONTINGENCIES

Purchase Obligations

At January 31, 2020, the Company had \$18.2 million of other non-cancelable contractual obligations, related to the purchase of goods and services.

Indemnifications

The Company sells software licenses and services to its customers under written agreements. Each agreement contains the relevant terms of the contractual arrangement with the customer and generally includes certain provisions for indemnifying the customer against losses, expenses and liabilities from damages that may be awarded against the customer in the event the Company's software is found to infringe upon certain intellectual property rights of a third party. The agreements generally limit the scope of and remedies for such indemnification obligations in a variety of industry-standard respects.

The Company believes its internal development processes and other policies and practices limit its exposure related to the indemnification provisions of the agreements. For several reasons, including the lack of prior indemnification claims and the lack of a monetary liability limit for certain infringement cases under the agreements, the Company cannot determine the maximum amount of potential future payments, if any, related to such indemnification provisions.

Legal Actions

The Company is subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material adverse effect on the Company's consolidated results of operations, financial position or liquidity.

13. BUSINESS SEGMENT INFORMATION

The Company markets its products and services worldwide, primarily to companies in the manufacturing industry, including automotive, consumer products, food and beverage, high technology, industrial products and life sciences industries. The Company sells and licenses its products through its direct sales force in four geographic regions: North America; Europe, the Middle East and Africa (EMEA); Asia Pacific; and Latin America and through distributors where third parties can extend sales reach more effectively or efficiently. The North America region includes the United States and Canada. The EMEA region includes Europe, the Middle East and Africa. The Asia Pacific region includes Asia and Australia. The Latin America region includes South America, Central America and Mexico. In accordance with Topic 606, the Company reports disaggregated revenue by geography and by industry as the Company believes it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. The Company does not consider reporting by industry an operating segment in accordance with ASC 280, *Segment Reporting*, because discrete financial information by industry is not available. The Company's Chief Operating Decision Maker, the Chief Executive Officer, reviews the consolidated results within one operating segment.

Subscription, license and maintenance revenues are generally assigned to the region where a majority of end users are located. Professional services revenue is assigned based on the region where the services are delivered.

| | Years Ended January 31, | | |
|-------------------------|-------------------------|-------------------|-------------------|
| | 2020 | 2019 | 2018 |
| | (in thousands) | | |
| Revenue: | | | |
| North America (1) | \$ 151,097 | \$ 162,307 | \$ 141,614 |
| EMEA | 90,885 | 96,989 | 89,693 |
| Asia Pacific | 46,363 | 51,628 | 50,689 |
| Latin America..... | 22,427 | 22,092 | 23,022 |
| | <u>\$ 310,772</u> | <u>\$ 333,016</u> | <u>\$ 305,018</u> |

(1) Sales into Canada accounted for 2% of North America total revenue for each of the fiscal years 2020, 2019 and 2018.

Property and equipment, net are assigned by geographic region based on the location of each legal entity.

| | January 31, | |
|------------------------------|------------------|------------------|
| | 2020 | 2019 |
| | (in thousands) | |
| Property and equipment, net: | | |
| North America..... | \$ 23,439 | \$ 24,735 |
| EMEA | 3,262 | 3,090 |
| Asia Pacific | 1,674 | 1,408 |
| Latin America..... | 312 | 388 |
| | <u>\$ 28,687</u> | <u>\$ 29,621</u> |

14. QUARTERLY INFORMATION (Unaudited)

| | Quarters Ended | | | |
|-------------------------------------|---------------------------------------|-----------|-----------|-----------|
| | April 30 | July 31 | Oct. 31 | Jan. 31 |
| | (in thousands, except per share data) | | | |
| Fiscal 2020 | | | | |
| Total revenue | \$ 78,035 | \$ 76,378 | \$ 77,807 | \$ 78,552 |
| Total costs and expenses..... | 81,297 | 80,551 | 76,411 | 78,201 |
| Gross margin..... | 41,101 | 40,346 | 44,090 | 45,326 |
| Operating (loss) income..... | (3,262) | (4,173) | 1,396 | 351 |
| Net (loss) income..... | (3,234) | (13,250) | 125 | 410 |
| Basic net (loss) income per share | | | | |
| Class A | \$ (0.17) | \$ (0.69) | \$ 0.01 | \$ 0.02 |
| Class B | (0.14) | (0.57) | 0.01 | 0.02 |
| Diluted net (loss) income per share | | | | |
| Class A | \$ (0.17) | \$ (0.69) | \$ 0.01 | \$ 0.02 |
| Class B | (0.14) | (0.57) | 0.01 | 0.02 |
| Fiscal 2019 | | | | |
| Total revenue | \$ 86,190 | \$ 84,543 | \$ 79,577 | \$ 82,706 |
| Total costs and expenses..... | 84,381 | 82,817 | 77,103 | 79,142 |
| Gross margin..... | 45,123 | 44,107 | 42,216 | 45,686 |
| Operating income..... | 1,809 | 1,726 | 2,474 | 3,564 |
| Net income..... | 1,397 | 1,113 | 2,982 | 4,936 |
| Basic net income per share | | | | |
| Class A | \$ 0.07 | \$ 0.06 | \$ 0.16 | \$ 0.26 |
| Class B | 0.06 | 0.05 | 0.13 | 0.22 |
| Diluted net income per share | | | | |
| Class A | \$ 0.07 | \$ 0.05 | \$ 0.14 | \$ 0.24 |
| Class B | 0.06 | 0.05 | 0.12 | 0.21 |

SCHEDULE II
SCHEDULE OF VALUATION AND QUALIFYING ACCOUNTS
(in thousands)

| | Balance at Beginning of Period | Charged to Statements of Operations and Comprehensive (Loss) Income | Write-Offs, Net of Recoveries | Impact of Foreign Currency Translation | Balance at End of Period |
|---------------------------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------|-----------------------------------------|
| Year ended January 31, 2018 | | | | | |
| Allowance for bad debt | \$ 1,090 | \$ 98 | \$ (834) | \$ 42 | \$ 396 |
| Allowance for sales adjustments | 1,115 | 923 | (733) | 62 | 1,367 |
| Total allowance for doubtful accounts | <u>\$ 2,205</u> | <u>\$ 1,021</u> | <u>\$ (1,567)</u> | <u>\$ 104</u> | <u>\$ 1,763</u> |
| Year ended January 31, 2019 | | | | | |
| Allowance for bad debt | \$ 396 | \$ 144 | \$ (31) | \$ (22) | \$ 487 |
| Allowance for sales adjustments | 1,367 | 1,608 | (518) | (43) | 2,414 |
| Total allowance for doubtful accounts | <u>\$ 1,763</u> | <u>\$ 1,752</u> | <u>\$ (549)</u> | <u>\$ (65)</u> | <u>\$ 2,901</u> |
| Year ended January 31, 2020 | | | | | |
| Allowance for bad debt | \$ 487 | \$ 92 | \$ (24) | \$ (12) | \$ 543 |
| Allowance for sales adjustments | 2,414 | 393 | (376) | (34) | 2,397 |
| Total allowance for doubtful accounts | <u>\$ 2,901</u> | <u>\$ 485</u> | <u>\$ (400)</u> | <u>\$ (46)</u> | <u>\$ 2,940</u> |

See accompanying report of independent registered public accounting firm.

INDEX OF EXHIBITS

| EXHIBIT NUMBER | EXHIBIT TITLE |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.1 | Amended and Restated Certificate of Incorporation of the Registrant, filed with the Delaware Secretary of State on December 15, 2010 (Incorporated by reference to Exhibit 3.1 of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2011) |
| 3.2 | Revised Bylaws of the Registrant (Incorporated by reference to Exhibit 3.1 of the Registrant's Form 8-K filed on December 13, 2013) |
| 4.1 | Specimen Class A and Class B Common Stock Certificate (Incorporated by reference to Exhibit 4.1 of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2011) |
| 4.2 | Description of Registrant's securities registered pursuant to the Securities Exchange Act of 1934, as amended* |
| 10.1(a) | Forms of Agreement for QAD Inc. 2006 Stock Incentive Program (Incorporated by reference to Exhibit 10.2(a) of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2009) |
| 10.2 | Form of Indemnification Agreement with Directors and Executive Officers (Incorporated by reference to Exhibit 10.3 of the Registrant's Registration Statement on Form S-1 (Commission File No. 333- 28441))† |
| 10.3 | Executive Termination Policy (Incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2011)† |
| 10.4 | Change in Control Policy (Incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2011)† |
| 10.4(a) | Change in Control Agreement for Anton Chilton (Incorporated by reference to Exhibit 10.4(a) of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2019)† |
| 10.4(b) | Change in Control Agreement for Pam Lopker (Incorporated by reference to Exhibit 10.6 of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2009)† |
| 10.4(c) | Change in Control Agreement for Daniel Lender (Incorporated by reference to Exhibit 10.7(a) of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2009)† |
| 10.5 | Offer letter between the Registrant and Daniel Lender dated October 10, 2008 (Incorporated by reference to Exhibit 10.72 of the Registrant's Quarterly Report on Form 10-Q for the quarter ended October 31, 2008)† |
| 10.6(a) | Acknowledgement between the Registrant and Daniel Lender dated October 10, 2008 (Incorporated by reference to Exhibit 10.3 of the Registrant's Quarterly Report on Form 10-Q for the quarter ended April 30, 2011)† |
| 10.6(b) | Acknowledgement between the Registrant and Anton Chilton dated December 19, 2018 (Incorporated by reference to Exhibit 10.6(b) of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2019)† |
| 10.7 | Credit Agreement between the Registrant and Rabobank, N.A. effective as of May 30, 2012 (Incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on June 5, 2012) |
| 10.7(a) | Real Estate Term Loan Note between the Registrant and Rabobank, N.A. effective as of May 30, 2012 (Incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on June 5, 2012) |
| 10.7(b) | Deed of Trust between the Registrant and Rabobank, N.A. effective as of May 30, 2012 (Incorporated by reference to Exhibit 10.3 of the Registrant's Form 8-K filed on June 5, 2012) |
| 10.7(c) | ISDA 2002 Master Agreement between the Registrant and Rabobank, N.A. effective as of May 30, 2012 (Incorporated by reference to Exhibit 10.4 of the Registrant's Form 8-K filed on June 5, 2012) |
| 10.7(d) | ISDA Schedule to the 2002 Master Agreement between the Registrant and Rabobank, N.A. effective as of May 30, 2012 (Incorporated by reference to Exhibit 10.5 of the Registrant's Form 8-K filed on June 5, 2012) |

| EXHIBIT NUMBER | EXHIBIT TITLE |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10.7(e) | Confirmation of a Swap Transaction between the Registrant and Rabobank, N.A. effective as of June 4, 2012 (Incorporated by reference to Exhibit 10.6 of the Registrant's Form 8-K filed on June 5, 2012) |
| 10.8 | 2016 Stock Incentive Program (Incorporated by reference to Exhibit A of the Company's Definitive Proxy Statement for the Registrant's 2016 Annual Meeting of Stockholders filed on Schedule 14A on April 29, 2016). † |
| 10.8(a) | Form of Stock Rights Agreement under the 2016 Stock Incentive Program (Incorporated by reference to Exhibit 10.2 of the Registrant's Form 8-K filed on June 17, 2016)† |
| 10.8(b) | Form of Restricted Stock Unit Agreement under the 2016 Stock Incentive Program (Incorporated by reference to Exhibit 10.3 of the Registrant's Form 8-K filed on June 17, 2016)† |
| 10.8(c) | Form of Stock Appreciation Rights Agreement under the 2016 Stock Incentive Program (Incorporated by reference to Exhibit 10.4 of the Registrant's Form 8-K filed on June 17, 2016)† |
| 10.8(d) | Form of Performance Share Agreement under the 2016 Stock Incentive Program (Incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-k filed on June 27, 2019)† |
| 10.9 | Offer letter between the Registrant and Anton Chilton, dated December 19, 2018 (Incorporated by reference to Exhibit 10.1 of the Registrant's Form 8-K filed on December 21, 2018).† |
| 10.10 | Partner Agreement between the Registrant and Progress Software Corporation dated February 1, 2007, as amended by First Amendment to Partner Agreement dated October 30, 2007, Second Amendment to Partner Agreement dated January 30, 2008, SaaS Amendment to Partner Agreement dated May 6, 2008, Third Amendment to Partner Agreement dated July 31, 2008, Savvion Amendment to Partner Agreement dated February 15, 2011, Sixth Amendment to Partner Agreement dated May 16, 2014, Seventh Amendment to Partner Agreement dated July 29, 2014, Eighth Amendment to Partner Agreement dated January 11, 2016, and Ninth Amendment to Partner Agreement dated January 22, 2016 (Incorporated by reference to Exhibit 10.11 of the Registrant's Form 10-K/A filed on June 30, 2017. Filed in redacted form as confidential treatment as to certain portions of such exhibit has been granted by the Securities and Exchange Commission and was separately filed with the SEC.). |
| 21.1 | Subsidiaries of the Registrant* |
| 23.1 | Consent of Independent Registered Public Accounting Firm* |
| 31.1 | Certification by the Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 31.2 | Certification by the Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 32.1 | Certification by the Chief Executive Officer and the Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002* |
| 101.INS | XBRL Instance Document* |
| 101.SCH | XBRL Taxonomy Extension Schema Document* |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document* |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document* |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document* |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document* |

* Indicates the document is filed herewith.

** Indicates the document is furnished herewith.

† Indicates a management contract or compensatory plan or arrangement required to be filed as an exhibit.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, on April 13, 2020.

QAD Inc.

By: /s/ Daniel Lender
Daniel Lender
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the Registrant and in the capacities and on the date indicated.

| <u>Signature</u> | <u>Title</u> | <u>Date</u> |
|---------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|
| <u>/s/ Anton Chilton</u> Anton Chilton | Chief Executive Officer, Director (Principal Executive Officer) | April 13, 2020 |
| <u>/s/ Pamela M. Lopker</u> Pamela M. Lopker | President, Director | April 13, 2020 |
| <u>/s/ Daniel Lender</u> Daniel Lender | Executive Vice President, Chief Financial Officer (Principal Financial Officer) | April 13, 2020 |
| <u>/s/ Kara Bellamy</u> Kara Bellamy | Sr. Vice President, Corporate Controller (Chief Accounting Officer) | April 13, 2020 |
| <u>/s/ Scott J. Adelson</u> Scott J. Adelson | Director | April 13, 2020 |
| <u>/s/ Kathleen M. Crusco</u> Kathleen M. Crusco | Director | April 13, 2020 |
| <u>/s/ Peter R. van Cuylenburg</u> Peter R. van Cuylenburg | Chairman of the Board | April 13, 2020 |
| <u>/s/ Lee D. Roberts</u> Lee D. Roberts | Director | April 13, 2020 |

**Description of Registrant's Securities Registered
Pursuant to the Securities Exchange Act of 1934, as Amended**

General

The following description summarizes certain important terms of the capital stock of QAD Inc. (the “company,” “we,” “us” and “our”). Because it is only a summary, it does not contain all the information that may be important to you. For a complete description of the matters set forth herein, you should refer to our amended and restated certificate of incorporation (“Certificate of Incorporation”), our revised bylaws, and to the applicable provisions of Delaware law.

Our authorized capital stock consists of 80,000,000 shares of capital stock, \$0.001 par value per share, of which:

- 5,000,000 are designated as preferred stock;
- 71,000,000 are designated as common stock, Class A; and
- 4,000,000 are designated as common stock, Class B

Common Stock***Dividend Rights***

The holders of our common stock are entitled to receive such dividends as may be declared thereon by the Board out of funds legally available therefor. No dividend may be paid on one class of common stock unless a dividend is paid simultaneously on the other class of common stock. If the Board determines to provide the holders of one class of common stock the option to receive a dividend in cash or in stock, the same option must be simultaneously provided to the other class of common stock. Generally, holders of Class A common stock are entitled to cash or stock dividends equal to 120% of the amount of such dividends payable with respect to a share of Class B common stock.

Terms of Conversion

Neither the Class A common stock nor the Class B common stock is convertible into another class of Common Stock or any other security of ours, except that all outstanding shares of Class A common stock may be converted into Class B common stock on a share-for-share basis, at the discretion of our Board, if, as a result of any statute, law, regulation, court order, legal process or rule interpretation of a national securities exchange, either the Class A common stock or Class B common stock is, or both are, excluded from listing on Nasdaq or, if such shares are then listed on any other national securities exchanges, from trading on the principal national securities exchange on which the shares are then traded.

Voting Rights

The Class A common stock and the Class B common stock vote on all matters as a single class, except as otherwise set forth below or as required by applicable law. The holder of each share of our Class A common stock is entitled to 1/20th of one vote for each share of Class A common stock owned by such holder, and the holder of each share of our Class B common stock is entitled to one vote for each share of Class B common stock owned by such holder, in connection with the election of directors and on all other actions presented to our stockholders at a meeting or in connection with any action by written consent of the stockholders.

Under Delaware law, the holders of our Class A common stock and our Class B common stock are each entitled to vote as a separate class on any amendments to our Certificate of Incorporation which would (i) increase or decrease the aggregate number of authorized shares of such class, (ii) increase or decrease the par value of the shares of such class, or (iii) amend the powers, preferences, or special rights of the shares of such class so as to affect such class adversely. Under Delaware law, such amendments would require the affirmative vote of a majority of the Class A common stock outstanding and entitled to vote on the amendment or the affirmative vote of a majority of the Class B common stock entitled to vote on the amendment, as applicable.

In addition to any vote required by applicable law, the consent of the holders of the Class A common stock, voting as a separate class, is required in order to (i) increase the number of authorized shares of Class B common stock, (ii) amend any

of the powers, preferences or special rights of the Class A common stock (whether by merger, consolidation or otherwise), (iii) amend any of the powers, preferences or special rights of the Class B common stock (whether by merger, consolidation or otherwise) to the extent that such amendment would affect the holders of the Class A common stock adversely or (iv) effect any reverse stock split that would have any adverse effect on the holders of the Class A common stock.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights or other subscription rights and is not subject to conversion, redemption or sinking fund provisions.

Right to Receive Liquidation Distributions

Upon our liquidation, dissolution or winding up, the holders of Class A common stock and the holders of Class B common stock would share ratably, on a per share basis, in our net assets of the Company available for distribution to holders of common stock.

Fully Paid and Non-Assessable

All of the outstanding shares of our common stock are fully paid and non-assessable.

Preferred Stock

Our Certificate of Incorporation contains authority for the Board to provide for the issuance of up to 5,000,000 shares of preferred stock in one or more series and to fix the designations, preferences and relative, participating, optional or other special rights of the shares of each such series and the qualifications, limitations or restrictions thereof, including but not limited to, those related to the declaration of dividends on the shares of each such series, any redemption provisions applicable to such shares, any sinking fund for the purchase or redemption of such shares, the convertibility of such shares, the voting power of such shares, any applicable restrictions on the issue or reissue of such shares, the amounts payable and the preferences if any of such shares, and any other relative rights, preferences and limitations on the shares of each such series.

Anti-Takeover Provisions

Our Certificate of Incorporation contains certain provisions that may have an “anti-takeover” effect. It contains authority for the Board to issue up to 5,000,000 shares of preferred stock without stockholder approval. The issuance of preferred stock could, among other things, have the effect of delaying, deferring or preventing a change in control of our company. The company could issue such shares in a manner that deters or seeks to prevent an unsolicited bid for us. The Certificate of Incorporation also does not provide for cumulative voting and, accordingly, a significant minority stockholder could not necessarily elect any designee to the board of directors.

The Delaware General Corporation Law provides generally that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation’s certificate of incorporation or bylaws, unless a corporation’s certificate of incorporation or bylaws, as the case may be, requires a greater percentage. Our Certificate of Incorporation and bylaws provide that the affirmative vote of at least 66-2/3 percent of the outstanding voting power of our then outstanding voting stock is required to amend, repeal or adopt certain provisions of our Certificate of Incorporation and bylaws relating to among other things, amendments to our charter documents, indemnification, notice of stockholder nominations, and rules and terms of directors and meetings of directors unless such changes are approved by a majority of the directors not affiliated or associated with any person, other than Pamela Lopker, holding (or which has announced an intent to acquire) 20% or more of the voting power of our then outstanding voting stock, voting together as a single class. These provisions could make it more difficult for a third party to acquire, or discourage a third party from seeking to acquire, control of us.

Our bylaws provide that, except as otherwise required by law, special meetings of the stockholders can only be called by our chairman of the board, our chief executive officer or our board of directors. In addition, our bylaws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of stockholders, including proposed nominations of candidates for election to the board of directors. Stockholders at an annual meeting may only consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of the board of directors, or by a stockholder of record on the record date for the meeting who is entitled to vote at the meeting and who has delivered timely written notice in proper form to our secretary of the stockholder’s intention to bring such business before the meeting. These provisions could have the effect of delaying until the next stockholder meeting stockholder actions that are favored by the holders of a majority of our outstanding voting securities.

Delaware Law

We are subject to Section 203 of the Delaware General Corporation Law. Subject to certain exceptions, Section 203 imposes a supermajority vote in order for a publicly held Delaware corporation to engage in a “business combination” with any “interested stockholder” for three years following the date that the person became an interested stockholder, unless the interested stockholder attained such status with the approval of our board of directors or unless the business combination was approved by our board of directors prior to the time such person became interested. The vote required is two-thirds of the voting power not held by the interested stockholder. A “business combination” includes, among other things, a merger or consolidation involving us and the “interested stockholder” or the sale of more than 10% of our assets to the interested stockholder. In general, an “interested stockholder” is any entity or person beneficially owning 15% or more of our outstanding voting power and any entity or person affiliated with or controlling or controlled by such entity or person.

Forum Selection

Our bylaws provide that unless the company consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the company, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer, employee or agent of the company to the company or the company’s stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, the Certificate of Incorporation or the bylaws or (iv) any action asserting a claim governed by the internal affairs doctrine, shall be a state or federal court located within the State of Delaware, in all cases subject to the court having personal jurisdiction over the indispensable parties named as defendants therein. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the company shall be deemed to have notice of and consented to these provisions of the bylaws.

Listing

QAD Class A Common Stock and Class B Common Stock are traded on the NASDAQ under the symbols “QADA” and “QADB”, respectively.

QAD Inc.

LIST OF REGISTRANT'S SUBSIDIARIES
(all 100% owned)

| <u>Subsidiary Name.</u> | <u>Country of Organization</u> |
|-----------------------------------------------------------------|---------------------------------------|
| QAD Australia Pty. Limited | Australia |
| QAD Europe NV/SA | Belgium |
| QAD (Bermuda) Ltd. | Bermuda |
| QAD Brasil Ltda. | Brazil |
| QAD Canada ULC | Canada |
| QAD China Ltd. | China |
| QAD Europe s.r.o. | Czech Republic |
| QAD Europe S.A.S. | France |
| DynaSys S.A.S. | France |
| QAD Europe GmbH | Germany |
| QAD Asia Limited | Hong Kong |
| QAD India Private Limited | India |
| PT QAD Asia Indonesia | Indonesia |
| Precision Software Limited | Ireland |
| QAD Europe (Ireland) Limited | Ireland |
| QAD Italy S.r.l. | Italy |
| QAD Korea Limited | Korea |
| QAD Mexicana, S.A. de C.V. | Mexico |
| QAD Sistemas Integrados Servicios de Consultoria, S.A. de C.V. | Mexico |
| QAD EMEA Holdings B.V. | Netherlands |
| QAD Europe B.V. | Netherlands |
| QAD Netherlands B.V. | Netherlands |
| QAD Polska Sp. z o.o. | Poland |
| QAD Lusitana Europe — Software e Servicos, Unipessoal, Limitada | Portugal |
| QAD Singapore Private Limited | Singapore |
| QAD Software South Africa (Proprietary) Limited | South Africa |
| QAD Europe S.L. | Spain |
| QAD Europe SA/AG | Switzerland |
| QAD (Thailand) Ltd. | Thailand |
| QAD Europe Limited | United Kingdom |
| QAD United Kingdom Limited | United Kingdom |
| QAD Brazil, Inc. | USA |
| QAD Holdings Inc. | USA |
| QAD Japan Inc. | USA |
| QAD Ortega Hill, LLC | USA |

Consent of Independent Registered Public Accounting Firm

The Board of Directors
QAD Inc.:

We consent to the incorporation by reference in the registration statement (Nos. 333-96065 and 333-198779) on Form S-3 and (Nos. 333-35367, 333-48381, 333-66610, 333-137417, 333-160125, and 333-212435) on Form S-8 of QAD Inc. of our report dated April 13, 2020, with respect to the consolidated balance sheets of QAD Inc. as of January 31, 2020 and 2019, the related consolidated statements of operations and comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended January 31, 2020, and the related notes and financial statement schedule II (collectively, the consolidated financial statements), and the effectiveness of internal control over financial reporting as of January 31, 2020, which report appears in the January 31, 2020 annual report on Form 10-K of QAD Inc.

The audit report covering the January 31, 2020 consolidated financial statements refers to a change in the method of accounting for leases as of February 1, 2019, due to the adoption of Accounting Standards Codification (ASC) Topic 842, *Leases*, and a change in the method of accounting for revenue recognition as of February 1, 2018, due to the adoption of ASC Topic 606, *Revenue from Contracts with Customers*.

/s/ KPMG LLP

Los Angeles, California
April 13, 2020

**CERTIFICATIONS UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Anton Chilton, certify that:

1. I have reviewed this Annual Report on Form 10-K of QAD 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13(a)-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15(d)-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 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 13, 2020

/s/ ANTON CHILTON
Anton Chilton
Chief Executive Officer
QAD Inc.

**CERTIFICATIONS UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Daniel Lender, certify that:

1. I have reviewed this Annual Report on Form 10-K of QAD 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(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13(a)-15(e) and 15(d)-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13(a)-15(f) and 15(d)-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 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 13, 2020

/s/ DANIEL LENDER

Daniel Lender
Chief Financial Officer
QAD Inc.

**CERTIFICATION FURNISHED 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 Annual Report of QAD Inc. (the "Company") on Form 10-K for the period ending January 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Anton Chilton, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 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 13, 2020

/s/ ANTON CHILTON
Anton Chilton
Chief Executive Officer
QAD Inc.

In connection with the Annual Report of QAD Inc. (the "Company") on Form 10-K for the period ending January 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Daniel Lender, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 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 13, 2020

/s/ DANIEL LENDER
Daniel Lender
Chief Financial Officer
QAD Inc.

CORPORATE INFORMATION

EXECUTIVE OFFICERS

Anton Chilton
Chief Executive Officer

Pamela M. Lopker
President

Daniel Lender
*Executive Vice President,
Chief Financial Officer*

Kara L. Bellamy
*Senior Vice President,
Corporate Controller,
and Chief Accounting Officer*

BOARD OF DIRECTORS

Anton Chilton
Chief Executive Officer

Pamela M. Lopker
President

Scott J. Adelson
*Senior Managing Director,
Co-President
Houlihan Lokey*

Kathleen M. Crusco
Senior Financial Executive

Peter R. van Cuylenburg
*Independent advisor to
high-technology companies*

Lee D. Roberts
*President and CEO,
BlueWater Consulting, LLC*

NORTH AMERICA LOCATIONS

California
Georgia
Illinois
Michigan
New Jersey

ASIA PACIFIC LOCATIONS

Australia
China
India
Indonesia
Japan
Singapore
Thailand

EUROPE, MIDDLE EAST AND AFRICA LOCATIONS

Belgium
France
Germany
Ireland
Italy
Netherlands
Poland
Spain
United Kingdom

LATIN AMERICA LOCATIONS

Brazil
Mexico

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

KPMG LLP
Los Angeles, California

LEGAL COUNSEL

Manatt, Phelps & Phillips LLP
Los Angeles, California

INVESTOR RELATIONS

PondelWilkinson Inc.
Los Angeles, California
Tel: 310.279.5980

TRANSFER AGENT/REGISTRAR

American Stock Transfer & Trust
Brooklyn, New York
Tel: 718.921.8124

STOCK INFORMATION

The company's common stock trades on the NASDAQ Global Select Market under the symbols QADA and QADB.

ANNUAL REPORT ON FORM 10-K

A copy of the company's annual report to the Securities and Exchange Commission on Form 10-K is available without charge upon request to the company's Investor Relations department or from the company's website at www.qad.com.

ANNUAL MEETING

The annual meeting of stockholders will be held on June 11, 2020 at 8:00 a.m. PDT at QAD Inc., 100 Innovation Place, Santa Barbara, California 93108. Tel: 805.566.6000.

QAD CORPORATE HEADQUARTERS

100 Innovation Place
Santa Barbara, California 93108
Tel: 805.566.6000
www.qad.com

