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, 2021

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	**77-0105228**
(State or Other Jurisdiction of Incorporation or Organization)	(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 has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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, 2020, the last business day of the Registrant's most recently completed second fiscal quarter, there were 17,364,966 shares of the Registrant's Class A common stock outstanding and 3,330,318 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, 2020) was approximately $361 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, 2021, there were 17,379,947 shares of the Registrant's Class A common stock outstanding and 3,330,318 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 21, 2021.

QAD INC.
FISCAL YEAR 2021 FORM 10-K ANNUAL REPORT
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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 2022.

PART I

ITEM 1. *BUSINESS*

QAD Inc. (QAD or the Company) is a leader in cloud-based enterprise software solutions for global manufacturing companies. We offer a full set of manufacturing enterprise resource planning (ERP) and supply chain management capabilities. Our core solutions, called QAD Adaptive Applications, are designed for manufacturers in six verticals: automotive, life sciences, consumer products, food and beverage, high technology and industrial products. We have acquired technologies which complement our core ERP capabilities and, as a result, we also sell some solutions to customers outside of the manufacturing industry via our Precision, Dynasys and Allocation Network divisions. Our architecture, called the QAD Enterprise Platform, allows manufacturers to quickly upgrade existing functionality and extend or create new applications that are dependable, secure and scalable.

Global manufacturers face 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. Traditional tactics, processes and systems can often hinder a company’s ability to respond to rapid change. QAD delivers rapid, agile and effective solutions to help Adaptive Manufacturing Enterprises rapidly respond to, and plan for, disruptions their businesses face today and provide the flexibility needed to address tomorrow’s challenges.

QAD provides Enterprise Software as a Service (SaaS) solutions, combined with vertical expertise and best practice process models that help customers enable the Adaptive Manufacturing Enterprise through both the deployment and implementation phases as well as making continuous improvement and adapting to change as efficiently as possible.

An Adaptive Manufacturing Enterprise requires the following five key capabilities: Effective Enterprise Management, Digital Manufacturing, Complete Customer Management, Integrated Supplier Management and Connected Supply Chain.

- **Effective Enterprise Management** provides shared services for finance and purchasing and real-time analytics across the entire business, and maintains accurate and timely core data and processes across the enterprise.
- **Digital Manufacturing** provides automation and optimization of workforce, machines and processes, resulting in optimal capacity utilization and real-time visibility from shop floor to boardroom and from supplier to customer.
- **Complete Customer Management** provides real-time feedback on all aspects of the customer experience and full product lifecycle support.
- **Integrated Supplier Management** provides real-time visibility of the supplier network and performance.
- **Connected Supply Chain** provides optimized flow of material and enables right-sized inventory management, intelligent forecasting, machine learning-driven sales and operations planning.

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

The key benefits of our solutions include greater out of the box fit; faster time to value; reduced implementation costs through a singular focus on global manufacturers; improved efficiency and customer responsiveness by upgrading to new versions quickly and flexibly; the ability to quickly adopt advanced technologies and support digital transformation, thereby reducing costs; the ability to gain real-time business insights for better decision making and key performance measurement via embedded analytics and sophisticated KPI tools; and the ability to respond to new business opportunities by easily adding apps using a dependable low/no code development environment.

QAD has over 300,000 active users, and over 2,000 manufacturing companies have deployed QAD solutions to run their businesses across approximately 4,000 sites globally. In fiscal 2021 our subscription users, including full users, limited users, enterprise users and module users, grew by 25% to 89,000, from 71,000 in the prior year.

QAD was founded in 1979 and our principal executive offices are located in Santa Barbara, California. Our office address is 100 Innovation Place, Santa Barbara, CA 93108. We employ 1,930 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 principal website address is www.qad.com.

OUR TARGET VERTICAL MARKETS

Within the six vertical markets QAD primarily serves -- automotive, life sciences, consumer products, food and beverage, high technology and industrial products -- we focus on 23 sectors where our solutions are a strong product fit for our customers' and prospects' business requirements. We offer solutions designed to answer the business challenges within each sector based on in-depth knowledge of the area and best practices. We also participate in industry groups serving our target sectors to address regulatory compliance issues, evaluate new manufacturing practices and leverage advanced technologies to give our customers the maximum competitive advantage.

Automotive: Automotive suppliers are a key focus for QAD. QAD's customer base includes companies serving the global automotive marketplace, focusing on two sectors: automotive tiered suppliers and the automotive aftermarket. QAD solutions are in use at many of the market-leading automotive parts companies around the world that manufacture a broad range of components used in both the internal combustion engine (ICE) and the Autonomous, Connected, Electric, and Shared (ACES) spaces. Automotive suppliers must comply with critical industry standards such as the Materials Management Operations Guideline/Logistics Evaluation (MMOG/LE) and the International Automotive Task Force (IATF) 16949:2016 in order to minimize the risk of supply chain disruption and earn preferred supplier status. QAD's automotive-specific processes are built on these industry best practices and help automotive suppliers reduce costs, increase the speed of implementations, mitigate supply chain risk and improve supply chain planning and visibility. We deliver unique capabilities to support risk management, collaboration, visibility and performance requirements of automotive suppliers, including the strict quality requirements of Advanced Product Quality Process (APQP) and Production Part Approval Process (PPAP). The QAD Enterprise Platform simplifies the adoption of digital technologies and makes it easy to modify our solution using a low/no code approach.

Life Sciences: Life sciences manufacturers are dedicated to innovation, product quality and patient safety. Challenges to this industry include a tightening regulatory environment, increasing cost pressures and greater supply chain complexities. QAD focuses on the following four sectors in the life sciences industry: medical devices; life sciences contract manufacturing; in vitro diagnostics (IVD); and pharmaceutical and biotechnology. QAD solutions help global life sciences companies manufacture products in accordance with current Good Manufacturing Practices (cGMP) regulations and standards such as 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 to help provide a solid foundation for addressing life sciences regulatory requirements while delivering innovative medical products, therapies, and diagnostic solutions.

Consumer Products: Manufacturers of consumer products face the challenge of delivering the right product, in the right quantities, to the right location, at the right time to satisfy demand. Effective supply chain management is required to synchronize critical activities and functions across the organization. QAD focuses on the following four sectors in the consumer products industry: household and personal packaged products, consumer electronics, assembled products and jewelry. The manufacturing processes for these items vary, but the fulfillment and distribution disruptions are similar, such as: the value chain has expanded and consumers can acquire products from more sources than ever before, retail supply chains are more complex and eCommerce has changed the marketplace. QAD solutions address the complex replenishment requirements of consumer products manufacturers that supply the value chain, including promotional pricing, demand planning, quality compliance and product configuration.

Food and Beverage: Food and beverage manufacturers are facing dramatic disruptions, including an expanding value chain, a supply chain in flux and evolving consumer preferences. Manufacturers face ongoing seasonal demand changes and evolving regulatory requirements, such as field-to-fork traceability, recordkeeping and proof of origin. QAD focuses on the following six sectors in the food and beverage industry: shelf-stable products; spirits, wine and beer; frozen foods; candy and confections; winemaking; and fresh foods products. QAD's solutions help manage compliance with regulatory and quality initiatives, such as the U.S. Food Safety Modernization Act (FSMA) and the Hazard Analysis and Critical Control Point (HACCP) analysis, which address the management of biological, chemical and physical hazards. QAD's 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. QAD's capabilities are designed to help food and beverage manufacturers streamline processes while meeting demand, maximizing profits and becoming adaptive, agile enterprises.

High Technology: Success in the high technology industry requires innovation and the ability to manage change. 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. QAD focuses on the following three sectors in the high technology industry: standalone devices and test equipment; industrial batteries and electronic components; and cables. High technology companies often require traceability of parts and processes throughout their supply chain, as well as tight control of engineering changes associated with rapid product cycles and revisions. Many high technology manufacturers face the challenge of managing product installation, support, and service of equipment after sale. A high technology manufacturer can use QAD's solutions to configure products based on customers' preferences; manufacture and assemble products according to a customized specification; and schedule, install and support equipment throughout its lifecycle.

Industrial Products: Global customers of industrial products companies are demanding more customized products and industrial manufacturers must be agile and responsive to demands while managing tight margins, operational challenges and rapid changes to product features. 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 distinct manufacturing methodologies, often within the same enterprise. QAD focuses on the following four sectors in the industrial products industry: packaging, engineered materials, industrial standalone equipment and roll stock, wire and cable. QAD's offerings include extending ERP into the manufacturing operation which enables collaboration between planning and execution. This capability reduces the dependence on spreadsheets, eliminates unnecessary expediting and provides a single enterprise wide vision of priorities.

OUR SOLUTIONS

QAD Adaptive Applications is the solutions portfolio QAD offers to manufacturers that includes our core solution, QAD Adaptive ERP. QAD Adaptive ERP provides manufacturers real-time insights across the value chain to make intelligent business decisions; supports manufacturers in rolling out new products, services and processes in markets experiencing disruption; and enables manufacturers to be more agile to rapidly respond to internal and external change.

Underlying QAD Adaptive ERP and other QAD Adaptive Applications is the QAD Enterprise Platform, which provides a modern, layered services application platform for QAD's solutions. The platform provides five rapid response technologies:

1. **Personalization:** Designed for users, personalization supports self-service modification of screens using a simple graphical point and click interface. Going beyond pre-defined job roles, individuals can select the fields and sections they want to see in the order they prefer, reducing distraction and streamlining tasks.
2. **Embedded Analytics:** One of the most common user requests to IT is to generate new or modified reports. Embedded Analytics puts powerful analytics and reporting in the hands of users who can rapidly create and modify reports and dashboards. This includes creating custom alerts that generate notifications when certain criteria or events are met.
3. **Modularization:** The modular design of QAD software allows customers to select only the areas of the platform they want to upgrade − without needing to upgrade the entire application. Modularization makes upgrades smaller, faster and easier, helping manufacturers utilize current functionality which reduces the gap between business needs and ERP.
4. **Extensibility:** Apps running on the QAD Enterprise Platform can be easily extended by leveraging the existing functionality, and using the Enterprise Platform to extend and deliver changes in functionality without the need to rewrite the entire app. The extensions are unobtrusive to the app itself, allowing for upgrades to the app without breaking an extension.
5. **Apps:** Leveraging modularization and extensibility, new apps can now be created without code. New apps leverage all the power of QAD Enterprise Platform, such as embedded analytics, collaboration, security and mobile.

QAD Adaptive Applications include Adaptive ERP, which provides comprehensive feature sets that directly address a manufacturer's main processes in the business areas of financials, manufacturing, customer and service management, and supply chain. Combined with other modules and capabilities in the Adaptive Applications portfolio, QAD provides a comprehensive suite of solutions, which correspond to the five capability areas of the Adaptive Manufacturing Enterprise: Effective Enterprise Management, Digital Manufacturing, Complete Customer Management, Integrated Supplier Management and Connected Supply Chain.

Effective Enterprise Management: The **QAD Financials** solution of QAD Adaptive ERP helps improve financial operational effectiveness. It meets the multi-entity, multi-GAAP and multi-currency requirements of global manufacturers and supports timely and accurate closings. It includes full lifecycle fixed assets capabilities, and supports essential financial requirements like allocations, credit management and cost management. **QAD Internationalization** automates the difficult task of tracking and developing solutions to comply with country-level tax payment and reporting compliance. The solution currently supports 66 countries. **QAD Cloud EDI, QAD EDI eCommerce** and **QAD e-Invoicing** offer solutions that address manufacturing industry de facto electronic commerce and statutory compliance standards.

Digital Manufacturing: The **QAD Manufacturing** solution of QAD Adaptive ERP improves production efficiency, supports lean processes, helps gain visibility across plans, schedules and supporting data, and accurately tracks manufacturing performance to eliminate waste. **QAD Production Execution** expands enterprise visibility to and from the shop floor, resulting in insights needed to optimize production processes and cycle times. **QAD Enterprise Asset Management** helps manage planned and unplanned equipment maintenance, including calibrations, procurement of MRO (maintenance, repair and operation supplies) inventory and capital asset project costs. **QAD Automation Solutions** digitizes the capture of material and production data, and prints labels containing the data required by the manufacturer, supplier and/or customer to improve material movement effectiveness. This results in improved warehouse and inventory management. **QAD EQMS** (Enterprise Quality Management System) offers comprehensive manufacturing process-integrated quality management to help manufacturers and their suppliers comply with industry-specific quality standards and facilitate risk management analysis. It supports a manufacturer's continuous improvement strategy and facilitates a preventative approach by building quality upfront in the product design phase.

Complete Customer Management: The **QAD Customer and Service Management** solution of QAD Adaptive ERP simplifies the management of all aspects of the customer lifecycle, from acquisition through customer service, including quotes, orders, pricing, promotions, customization, configuration, fulfillment, returns, repairs and service. It improves the accuracy of scheduled orders and releases, as well as global orders with available-to-promise visibility across the enterprise. **QAD Customer Self Service** facilitates real-time communication and ordering with a manufacturer's customers through a web storefront and self-service portal. **QAD Configurator** helps streamline the ordering of complex, configurable, customer-specific products using a rules-based approach that translates into validated and buildable product requirements for the shop floor. **QAD Trade Activity Management** helps manufacturers plan, control and track trade promotion activities and costs with full visibility into promotional spending to improve promotions, customer service and fulfillment performance. **QAD CRM for Manufacturers** supports control of the customer lifecycle including sales leads, opportunities, campaigns and account management, and helps improve a manufacturer's customers' experience and satisfaction. **QAD Field Service Management** manages product servicing, whether at the customer site or at depots. It provides product quality improvement requirements back to manufacturing and improves visibility and tracking of servicing activities and parts inventories.

Integrated Supplier Management: The **QAD Supplier Portal** facilitates real-time communication about inventory, purchase orders, shipments, kanbans, invoices and bills of material with suppliers. Purchasing capabilities automate many phases of procurement with suppliers from requisitioning, through order creation and printing, to recording the receipt of goods and services. **QAD Precision Global Trade and Transportation Execution** (GTTE) provides global trade management, transportation execution and shipping software solutions from a single, integrated platform. Global customers rely on QAD Precision's global carrier network and comprehensive trade-compliant document library to streamline global trade, leverage thousands of carriers and manage millions of shipping transactions every day. An ISO-certified company, QAD Precision assists companies around the world to minimize shipping costs, optimize first mile and last mile deliveries, avoid compliance delays and mitigate the risks associated with dynamic trading environments. The QAD Precision GTTE solution includes capabilities such as management of imports and exports, free trade agreements and zones, restricted party screening, delivery exception management and freight bill audit and pay.

On December 31, 2020, QAD acquired Allocation Network GmbH, a German-based best-of-breed provider of supply chain management solutions. The **QAD Supplier Management** and QAD **Sourcing products**, both obtained from the Allocation Network acquisition, deliver value across direct and indirect procurement activities by identifying and qualifying suppliers, helping negotiate best-value agreements, standardizing sourcing processes and managing sourcing knowledge.

Connected Supply Chain: The **Supply Chain** features of QAD Adaptive ERP help manufacturers manage global supply chain operations, address cross-border trade compliance and improve supply chain visibility to rapidly respond to supply chain turbulence. Some key capabilities include distribution requirements planning, requisitions, direct and indirect procurement, consignment and vendor management inventory. **QAD DynaSys DSCP** (Digital Supply Chain Planning) supports the development of supply chain plans and forecasts using in-memory collaborative techniques. It helps manufacturers align and synchronize strategic goals, sales forecasts and operations, and provides an advanced analytical framework for predicting demand. QAD DynaSys DSCP includes capabilities for demand planning, sales and operations planning, integrated business planning, inventory optimization, manufacturing planning and financial planning.

Cloud Technology Infrastructure and Operations

The QAD cloud environment is managed and operated by QAD utilizing infrastructure provided by third-party data center facilities or cloud computing platform providers. Our third-party data centers are located in the United States, the European Union, Singapore and China. The data centers provide the computing infrastructure on which our solutions operate. QAD employees and contractors, 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, security application management, service level management, disaster recovery, technical upgrades and customer engagement. Each of these managed processes is based on Information Technology Infrastructure Library (ITIL) standards and governed by ISO compliance.

QAD's infrastructure providers employ advanced measures to ensure physical integrity and security, including redundant power and cooling systems, fire and flood prevention mechanisms, continual security coverage, biometric readers at entry points and anonymous exteriors. QAD also implements various disaster recovery measures such that data loss would be minimized in the event of a single data center disaster. We architect our solutions using redundant configurations to minimize service interruptions. We continually monitor our solutions for any sign of failure or pending failure, and we take preemptive action to minimize or prevent downtime.

Our technology is based on multi-tenant and single-tenant architectures that apply common, consistent management practices for our customers.

Customer Support and Product Updates

Customer support services and product enhancements are provided to QAD cloud customers as part of their monthly subscription fee and to on-premises customers via a maintenance offering. These offerings provide customers the right to receive product upgrades and enhancements on a “when and if” available basis, and access to online and direct telephone technical support personnel located in global support centers. Through support services, we provide the resources, tools and expertise needed to maximize the use of QAD Adaptive Applications.

QAD Consulting and Transformation Services

QAD Consulting and Transformation Services (CTS) offers professional consulting services, including digital transformation consulting, implementation and deployment services, upgrade projects, training, technical development and integration to facilitate adoption of our Adaptive ERP solution and enable customer success.

Our CTS strategy is to enable QAD’s cloud growth by upgrading installed base customers to QAD Adaptive ERP and performing implementations for new customers. In line with QAD’s long-term business plan, QAD CTS is expanding its ecosystem of certified partners to provide increased capacity for customer needs. QAD CTS will focus on transformation consulting with customers while leveraging partners for scale and reach.

QAD CTS engages with customers across the entire enterprise application life cycle through planning, design, implementation and support. Whether our customers are using QAD solutions in the cloud or on-premises, the CTS group assists 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 an ecosystem of certified partners, QAD can offer customers these activities scaled to our customers’ needs. We also offer augmented resources through our partner ecosystem to assist with typical site-based implementation activities, such as data cleansing, functional support, training and user acceptance testing.

QAD’s principal methodology for deployment of our solutions is called Effective 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 product 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, implementations can be faster and more agile than traditional approaches.

Our Partner Network

QAD partners make us stronger and are a big part of the robust relationships we foster with our customers. The partner ecosystem is critical to help us meet demand from companies of all sizes across all geographies. With their knowledge of QAD Adaptive Applications and Adaptive ERP, partners are uniquely qualified to help us expand our brand and grow cloud revenue. QAD Global Partners expand the QAD ecosystem and strengthen its strategic position in the industries that we serve.

QAD Global Partners are classified into three categories: channel sales, consulting and solutions. We maintain a team of capable partners throughout the world. To augment the direct business and existing partners, we intend to add new partners to address specific growth in core industrial segments in each of our four geographic regions. The growing partner ecosystem will continue to add breadth and depth to our applications and services to serve our customers and address digital transformation needs.

Our channel sales consist 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.

QAD has a large network of global System Integrators (SI) and regional partners to support our customers with implementations of QAD Adaptive ERP. Our global SI partners help us scale and roll out Adaptive ERP to a large number of sites using QAD EOB implementation standards. Our regional partners provide implementation support to our regional customers and support local language and regulatory needs. We have built a comprehensive training program for our implementation partners. This program focuses on three main areas: QAD Adaptive ERP, QAD EOB Implementation standards and QAD Cloud standards. QAD direct services provides program management,advisory and expert consulting support to our partners and customers to help our customers become Adaptive Manufacturing Enterprises.

QAD and our partners continuously evolve, adding capabilities in sales, presales, services and certifications; and broadening QAD's expertise and footprint to meet the diverse needs of customers around the world. Currently, the Company’s partner network includes over 125 sales, consulting and solutions partners.

OUR GROWTH STRATEGY

QAD believes there are substantial growth opportunities in our cloud business. Global manufacturers are facing unprecedented levels of disruption and turbulence. COVID-19, as an example, has accelerated digital transformation. 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, rapid deployment and the ability to easily adapt and extend systems to meet the challenge of accelerating change.

Our growth strategy is supported by 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 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 selected three strategic areas with the greatest disruption to actively pursue new customers where we can provide the best product fit. These areas, called Strategic Business Segments, include: Automotive, Life Sciences and Packaging. Over the last several years we have increased our investment in sales, marketing and lead generation activities to facilitate new customer acquisition growth.

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 approximately 75% of our users currently on-premises, 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.

Deliver continuous product development and rapid response to change. Manufacturers are facing a swiftly-changing business environment fueled by exponential growth in underlying technologies such as Internet of Things (IoT), Machine Learning (ML), Artificial Intelligence (AI), Additive Manufacturing (3D Printing), Blockchain, Augmented Reality and Predictive Analytics. Collectively these technologies are driving trends such as digital transformation and smart manufacturing. 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 digital strategies 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 professional 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. We also employ people with specific knowledge and experience in the industries in which our customers operate. We provide our solutions to 23 sectors across six vertical manufacturing markets and we actively participate in several leading industry associations. In addition, 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. Our global partner strategy goals are to generate revenue growth through expanded sales reach and strengthened strategic positioning; sustainably grow coverage in core vertical markets and sectors; develop processes to maintain profitable operations for QAD and our partners; grow partner competencies and capabilities to address evolving customer needs through holistic enablement and collaborative relationship; enhance and augment lead generation and pipeline growth through collaboration and partner success management; and broaden coverage and increase capacity through partner ecosystem growth.

TECHNOLOGY

Manufacturers need to thrive and survive in today's world of continual disruption and turbulence. QAD Adaptive Applications are built on an application and technology platform, the QAD Enterprise Platform, which supports the principles of intelligence, agility, and innovation to provide a foundation for QAD Adaptive Applications.

The QAD Enterprise Platform leverages the best available technologies to target six key capabilities essential to an Adaptive Manufacturing Enterprise: effective user experiences, connections across the system, the value of data and decision intelligence, a low code app development platform and ecosystem, cloud delivery efficiency and data privacy and security.

We embrace 'openness' as a core principle of our designs, allowing customers freedom to choose devices and open connectivity with other systems. QAD Adaptive Applications solutions are built on a service-based architecture, which allows apps to be composed using industry standard messaging techniques via REST (Representational State Transfer) APIs. This allows customers to exploit the full benefit of QAD's open architecture for their businesses.

The QAD Enterprise Platform uses advanced technologies and development tools to build the breadth of functionality needed by 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 and collaboration, all bundled into a world-class user experience.

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 operation built around ITIL standards. QAD's cloud infrastructure operates on a platform that enables QAD to seamlessly deploy customer systems to one of several global cloud infrastructure providers as part of the QAD multi-cloud offering.

QAD adopts a pragmatic approach to technology and enables innovative solutions to address real world business problems faced by manufacturers. Innovation is achieved in partnership with our customers and industry leaders to research, educate each other and prove out new solutions through experimentation. The latter is achieved in the QAD Labs, the incubator for innovation across QAD. QAD Labs aspires to drive innovation credibility to our market and a culture of innovation across QAD. Successful solutions incubated in the QAD Labs include a fully integrated shop floor production execution system, a robotic process automation (RPA) offering and machine learning technology in our forecasting and planning solutions.

SECURITY

QAD's security strategy involves deploying people, process and technology to protect the confidentiality, integrity and availability of our customers' data and systems as well as QAD's internal operations and systems. We maintain cybersecurity and physical security for the protection of QAD employees, facilities, intellectual property and other assets. We extend these controls and protections to supplier management and partner clouds. We also build security into the design, build, testing and maintenance of QAD software products. QAD's security policies and controls are aligned with ISO/IEC 27001:2013 and CSA-STAR standards and guide all areas of security within QAD. Certain QAD products and services are certified per specific industry and government security standards.

PRODUCT DEVELOPMENT

Our customers have to deal with increasing levels of change, uncertainty and complexity on a continuous basis. From compliance factors to digital transformation, supply chain disruptions and geopolitical issues; global manufacturers need to be agile in extreme circumstances. In 2020, these challenges were exemplified by the business disruptions caused by COVID-19. Our customers had to adapt their business models to deal with social distancing, supply shortages and increased costs. Dealing with these challenges from a solution and technology perspective is what drives the vision for our products.

We maintain a global research and development organization that provides new product functionality to the market on a semiannual basis. In addition, our Internationalization effort incorporates regulatory changes, on an as required basis to satisfy country requirements. This approach to new product functionality enables us to respond quickly to industry disruptions and regulatory changes.

Our primary focus for development is to build our products in support of our SaaS direction. With SaaS solutions, customers expect 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. With every release, we perform routine security checks of the software to ensure our software is secure. In fiscal 2021, 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. We also delivered a new CRM app for manufacturers that gives our customers a full 360-degree view of their customer interactions. Our latest agile manufacturing module and production planning and scheduling functions are now fully integrated into the shop floor execution and reporting processes.

During fiscal 2021, we introduced our latest release of QAD Adaptive Applications and our 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. QAD's R&D team continues to deliver new capabilities that allow manufacturers to better address tomorrow's challenges and rapidly respond to disruption in the marketplace. We introduced a substantial update to our QAD Precision Global Trade Execution import solution in support of the continued changes in regulations and process across the globe. We have continued to enhance our QAD Enterprise Platform allowing users and developers to securely create extensions or applications with little or no coding, which allows us to extend the QAD ecosystem through our service partners.

QAD dedicates 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. We continue to see the global trend toward electronic invoicing and registration of shipments and invoices with government agencies to prevent falsification and tax evasion expand across the world. We strive to support our customers through these changes without interruption to their businesses using our software to assist them in meeting the legal requirements of the countries in which they do business.

Our global R&D organization consists of 475 employees primarily located in the United States, Ireland, China, India, Spain, Germany, France, Australia, Belgium, United Kingdom, Indonesia, Poland, and Brazil. 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. While our software is primarily developed internally, we also use independent companies and contractors to perform some of our product development activities when we require additional resources or specific skills or knowledge. All outside development is overseen by our internal R&D organization.

We also acquire products or technology developed by others, as needed, 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. 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 on the same timeframe, if at all, or may have an additional fee associated with it.

DIRECT SALES

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

The Company's direct sales organization includes approximately 68 commissioned salespeople. Supporting our commissioned salespeople are vertical market 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.

MARKETING

The QAD marketing strategy is to differentiate our offerings by focusing on our role in enabling manufacturers to overcome the change and uncertainty they face 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 target sectors within our primary verticals facing the greatest disruption, where we can provide the best fit and support those companies with the greatest need.

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 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

- Influencer Press and industry analyst relations to garner third-party validation and generate positive coverage for our company offerings and value proposition
- Physical and virtual 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 and focused retargeting
- Website 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
- Sales tools and field marketing events to enable our sales organization to more effectively convert leads into customers

We recognize that buying dynamics are changing and we are focused on engaging with prospects early in the sales cycle 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. A prospect's successful implementation of enterprise solutions is typically embedded in a larger change management project. The decision to buy enterprise solutions is, in part, based on a prospect's belief they can be successful in their change management efforts. We are increasing our scope beyond the enterprise solution to increase the prospect's confidence in their ability to overcome change management challenges in an effort to increase win rates and reduce "no decision" outcomes.

A critical role of marketing is to bring the voice of the customer into QAD. Vertical and Solutions Marketing work directly with customers and R&D to drive a market-driven roadmap resulting in products that deliver greater value, making them easier to market and sell.

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. Certain modules and functionality included in our ERP offering may also compete with cloud solutions and software companies providing a point solution.

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
- Speed and ease of initial deployment and version upgrades
- Total cost of ownership
- Performance and reliability
- Technological innovation and ability to respond to customer needs rapidly
- Reputation of the vendor
- Customer satisfaction

To continue our market success, we must respond promptly and effectively to technological change and competitors' innovation. Our ability to remain competitive will depend on our efforts in the areas of product development and sales, services and support operations.

HUMAN CAPITAL

As of January 31, 2021, we had approximately 1,930 full-time employees, including 805 in support, subscription and professional services, 475 in research and development, 375 in sales and marketing and 275 in administration. Generally, our employees are not represented by collective bargaining agreements. However, certain employees in our Dutch, French and Italian 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.

Our employees play a central role in the success of our long-term strategy. Our values — Driving for Results, Doing the Right Thing, Extreme Ownership, Commit to the Team, and Challenge the Status Quo — are built on the foundation that our people and the way we treat one another promote inclusion, creativity, innovation and productivity, which drives the company's success. We are continually investing in our global workforce to further drive inclusion, equity, and diversity. In 2020, we launched QAD's Inclusion and Diversity program (I&D). As a company, QAD has always endeavored to create a work environment where employees could bring their entire selves to work and perform at their very best. Through our I&D strategy we are formalizing our approach to inclusiveness and building upon our values to ensure we focus on maintaining a high performance culture that maximizes and leverages the unique skills and talents of every employee across our enterprise.

We believe we offer fair, competitive compensation and benefits that support our employees' overall well-being and foster their growth and development. To ensure alignment with our short-term and long-term goals, our compensation programs for employees include base pay, short-term incentives, and opportunities for long-term incentives. We offer a wide array of benefits including comprehensive health and welfare insurance; generous time-off and leave; and retirement programs. We provide emotional, physical, legal and financial well-being services through our Employee Assistance Program. Our emotional well-being support offers help with a wide range of issues including stress management, work/life balance, grief and loss, self-esteem and personal development. In addition, our financial education and financial wellness coaches offer employees tools and resources to reach their personal financial goals.

In response to the COVID-19 pandemic, we implemented significant changes that we determined were in the best interest of our employees as well as the communities in which we operate. These changes include having the vast majority of our employees work from home until the pandemic eases, while implementing additional safety measures for employees continuing critical on-site work during the pandemic. We have also added several company-wide paid days off and caregiving support to help employees balance their work and life responsibilities.

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 2021, 2020 and 2019 is presented in Note 15 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.

Risks Related to Our Company

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

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 caused 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, and 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 if our sales force is not able to successfully sell the new pricing models to new customers or transition existing customers to the new pricing models effectively. Failed pricing models and our inability to establish or maintain standalone selling prices (SSP) may result in negative revenue recognition impacts.

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 our products' compatibility 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.

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.

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, or enjoy advantages from narrower niche or point solution focus. 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 manufacturing verticals: 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 manufacturing verticals and geographies. The failure of our products to achieve or maintain substantial market acceptance in one or more of these verticals or geographies could have an adverse effect on us. If any of these targeted verticals or geographies experience a material slowdown or reduced growth, those conditions may adversely affect the demand for our products and have a more pronounced adverse impact on our revenue compared to competitors who sell products to many industries beyond manufacturing across many geographies.

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 have a material adverse effect on our business, financial condition or operating results. Such risks include failing to efficiently integrate the new business and failing to realize the benefits anticipated from the acquisition.

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.

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

We derive about half of our total revenue from sales outside the United States. A significant aspect of our strategy is to focus on developing business in foreign and 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 the Brexit withdrawal 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.

Risks Related to Our Industry

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.

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.

We or our third-party service providers may experience a security breach, or unauthorized parties may otherwise obtain access to our customers' data, our data or our cloud services.

SolarWinds, an information technology company, was the subject of a cyberattack that created security vulnerabilities for thousands of its clients. We identified a compromised SolarWinds server and promptly took steps to contain the incident. While we believe that no customer operations were disrupted as a result of this attack, similar attacks could have a significant negative impact on our systems and operations. In addition, third parties may attempt to fraudulently induce our employees, vendors, partners, or users to disclose information to gain access to our data or our users' data and there is the risk of employee, contractor or vendor error or malfeasance impacting our data or our users' data. Despite efforts to create security barriers to such threats, it is impossible for us to entirely eliminate these risks. If there are future security breaches, our offerings may be perceived as not being secure, our reputation may be harmed, demand for our offerings may be reduced, additional liabilities may be created and our financial results may be adversely impacted.

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.

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.

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.

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.

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.

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 implement and support QAD software products and technology or increase support for competitive products or technology, we could be adversely affected.

Risks Related to Laws and Regulations

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. In July 2020, the European Union (EU) invalidated the Privacy Shield framework with the United States, which previously provided a mechanism for companies to transfer data from EU member states to the U.S. This action generated 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.

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 negative tax consequences and 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.

Federal, state and foreign governments have enacted various laws in response to the COVID-19 pandemic and we continue to examine the impacts such laws may have on our business. Furthermore, 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.

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.

Risks Related to Ownership of Our Stock

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 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.

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 collectively have approximately 79% of the voting power of our outstanding capital stock as of January 31, 2021. As of January 31, 2021, Pamela Lopker beneficially owned approximately 31% of the outstanding shares of our Class A common stock and approximately 77% 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.

General Risks

Continuation of the COVID-19 pandemic may adversely affect our business, operations and financial results.

The continuation of the global COVID-19 pandemic may negatively impact our business, operations and financial results in future years, depending on the length of the pandemic and its economic repercussions. As the virus has spread, it has significantly impacted health and the economic environment around the world and governments have instituted measures to control its spread. 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, supply chain effectiveness, production of goods and transportation.

The future impacts of the ongoing pandemic on our business, operations and financial results could include, but are not limited to:

- Deferral or cancellation of new purchases of cloud services, professional services and licenses;

- Renewal of cloud services and maintenance at lower amounts, or not at all;

- Disruptions in our ability to deliver our cloud services to our customers resulting in failure to meet service level agreement commitments;

- Cancellation or delay of existing professional services projects;
- Reduced effectiveness of professional services that are more effective when performed directly with the customer onsite;
- Requests for changes to payment terms; and
- Existing customers going out of business.

Such impacts may trigger fees owed to customers and negatively impact our revenue, customer satisfaction and ultimately customer retention.

The impact of the COVID-19 pandemic on our business, results of operations, overall financial performance and liquidity is unpredictable due to the continued evolution in the severity and duration of the COVID-19 pandemic and the effectiveness of governmental control measures. The effect of the COVID-19 pandemic may not be fully reflected in our results of operations and overall financial performance until future periods and may have a material negative impact.

Other 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. 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.

Continued growth could strain our 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, 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 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 infrastructure, we may be unable to execute our business plan.

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.

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.

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.

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, Australian dollar, Mexican peso and British pound, relative to the United States dollar can significantly and adversely affect our revenues, expenses and operating results.

Our stock price could become more volatile and investments in our stock 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.

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 2021 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. In addition, we may be unable to maintain our current effective internal controls due to the current volatility in the market or due to the difficulties surrounding any acquisitions we may make 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.

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. 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.

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 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 2021:				
Fourth quarter	$ 41.33	$ 69.46	$ 29.14	$ 51.35
Third quarter	37.02	48.16	28.16	35.31
Second quarter	37.38	48.33	25.50	33.17
First quarter	28.21	54.44	20.53	38.00

	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

Holders

As of March 31, 2021, there were approximately 116 shareholders of record of our Class A common stock and approximately 107 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 2021 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.

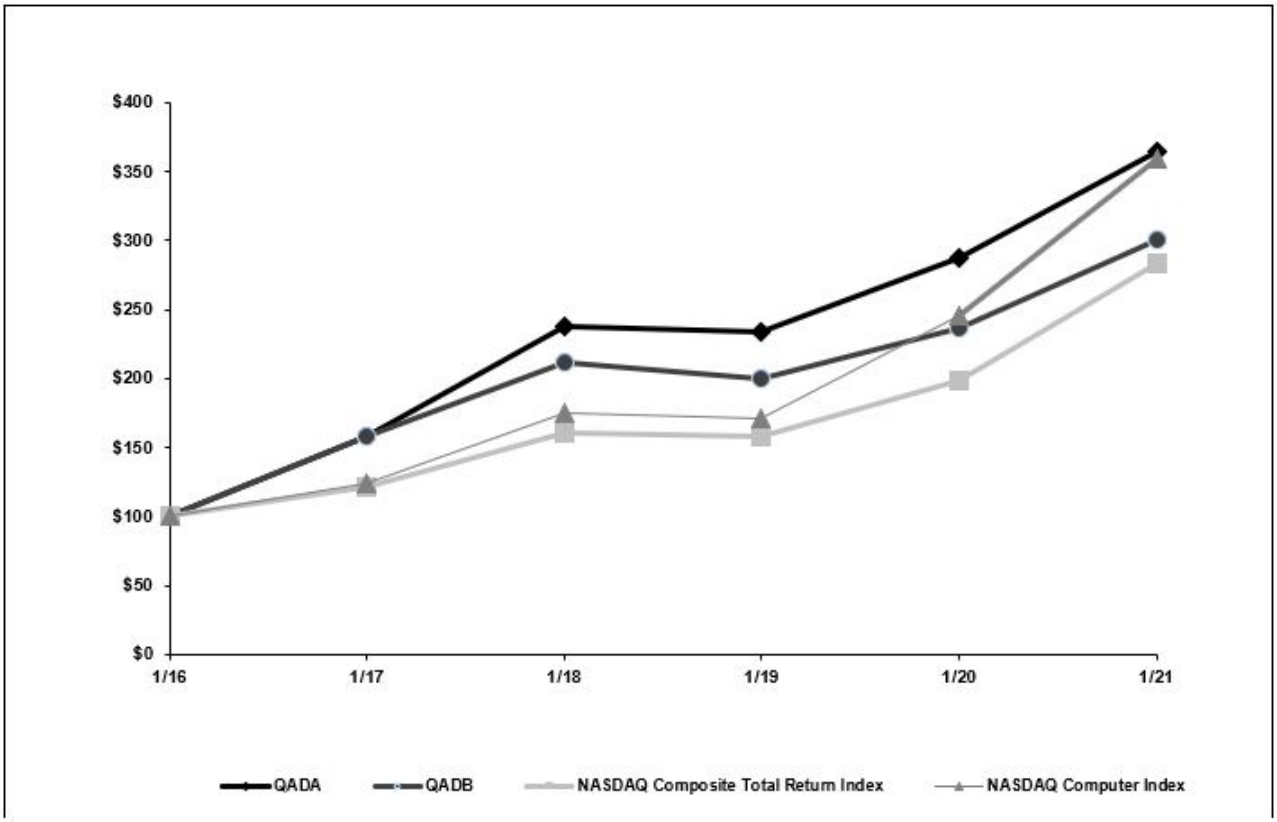
STOCKHOLDER RETURN PERFORMANCE GRAPH

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, 2016 and ending January 31, 2021.

The graph assumes that $100 was invested in QAD common stock on January 31, 2016 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 2016 through Fiscal Year 2021)	QADA	QADB	NASDAQ Composite Total Return Index	NASDAQ Computer Index
01/31/16	100.00	100.00	100.00	100.00
01/31/17	158.15	158.23	121.69	123.65
01/31/18	237.86	211.90	160.63	174.81
01/31/19	234.10	199.87	157.82	171.09
01/31/20	287.45	236.22	198.33	246.18
01/31/21	364.22	299.91	283.29	359.68

ITEM 6. *SELECTED FINANCIAL DATA*

Omitted at registrant's option.

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, 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, EMEA, Asia Pacific and Latin America. In fiscal 2021, approximately 51% of our total revenue was generated in North America, 30% in EMEA, 13% in Asia Pacific and 6% 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, 2021, we employed approximately 1,930 employees worldwide, of which 615 employees were based in North America, 650 employees in EMEA, 555 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 have transitioned 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 2021, we closed most of our new customer deals in the cloud. Subscription revenue grew 22% in fiscal 2021 compared to fiscal 2020 and our twelve-month trailing subscription billings grew by 18%, with a three-year compound annual growth rate (CAGR) of 21%. In addition, we have converted approximately 25% 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 78% of total revenue in fiscal 2021. 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 continue to 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 late 2019, a novel strain of the coronavirus disease (COVID-19) was identified in China, and in March 2020, the World Health Organization characterized the COVID-19 outbreak as a pandemic. The COVID-19 pandemic has resulted in authorities implementing numerous measures to try to contain and mitigate the virus, including travel bans and restrictions; business shut-downs and limitations; quarantines and shelter-in-place; and social distancing orders.

Our customers are global manufacturers and the closure of manufacturing sites and country borders, and the increase in unemployment due to the COVID-19 global pandemic, are having and will continue to have negative implications on demand for some goods, the supply chain, production of goods and transportation. Furthermore, the future impact to our manufacturing customers depends on the duration and spread of the virus. The negative impact on some of our manufacturing customers has caused some of them to delay purchasing decisions, postpone services projects, reduce users or modules, cancel their maintenance or subscription contracts, request extended payment terms, or request higher discounts.

Our priorities during the pandemic have been the health and well-being of our employees, our customers and their respective families and communities as well as maintaining continuity of service for our cloud and on-premises customers and those customers with implementation or upgrade projects. Beginning in the first fiscal quarter and through the remainder of fiscal 2021, we took actions in response to the pandemic that focused on maintaining business continuity, supporting our employees, helping our customers and communities and preparing for the long-term success of our business. We are continuing to conduct business during the COVID-19 pandemic with substantial modifications to employee travel, employee work locations, and virtualization, postponement or cancellation of certain sales and marketing events, among other modifications.

The extent to which the COVID-19 pandemic may impact our financial condition or results of operations in future periods remains uncertain. The effect of the COVID-19 pandemic may not be fully reflected in our results of operations and overall financial performance until future periods. We have experienced, and may continue to experience, decreased customer demand, reduced customer spending, customer bankruptcies and other non-payment situations, shorter contract duration, longer sales cycles and extended payment terms, any of which could materially adversely impact our business, results of operations and overall financial performance in future periods. The extent and continued impact of the COVID-19 pandemic on our operational and financial performance will depend in part on future developments and conditions, including the duration and spread of the outbreak; government responses; the impact on our customers and our sales cycles; delays in hiring and onboarding new employees; and the effect on our partners, vendors and supply chains, all of which are uncertain and difficult to predict. In the first quarter of fiscal 2021, we closed our offices globally and our employees worked remotely. These actions remained in effect throughout fiscal 2021 and is expected to extend into future quarters. The impact, if any, of these and any additional operational changes we may implement is uncertain, but actions we have taken to date in response to the pandemic have not materially impaired, and are not expected to materially impair our ability to maintain operations, including financial reporting systems, internal control over financial reporting and disclosure controls and procedures. See the section “Risk Factors” for further discussion of the possible impact of the COVID-19 pandemic on our business.

RESULTS OF OPERATIONS

We operate in several geographical regions as described in Note 15 “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

(in thousands)	Year Ended January 31, 2021	Year Ended January 31, 2020	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported	
					$	%
Revenue						
Subscription	$ 131,133	$ 107,168	$ 24,303	$ (338)	$ 23,965	22%
Percentage of total revenue	43%	35%				
License	11,152	16,570	(5,470)	52	(5,418)	-33%
Percentage of total revenue	3%	5%				
Maintenance	107,083	117,896	(10,541)	(272)	(10,813)	-9%
Percentage of total revenue	35%	38%				
Professional services	58,497	69,138	(9,981)	(660)	(10,641)	-15%
Percentage of total revenue	19%	22%				
Total revenue	$ 307,865	$ 310,772	$ (1,689)	$ (1,218)	$ (2,907)	-1%

(in thousands)	Year Ended January 31, 2020	Year Ended January 31, 2019	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
Revenue						
Subscription	$ 107,168	$ 91,861	$ 16,473	$ (1,166)	$ 15,307	17%
Percentage of total revenue	35%	28%				
License	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	$ 310,772	$ 333,016	$ (16,050)	$ (6,194)	$ (22,244)	-7%

Total Revenue. On a constant currency basis, total revenue was $307.9 million for fiscal 2021, representing a $1.7 million, or 1%, decrease from $309.6 million for fiscal 2020. When comparing categories within total revenue at constant currency rates, our results for fiscal 2021 when compared to the prior year included decreases in maintenance, professional services and license due in part to the global pandemic and in part due to our continued strategy to convert existing customers to the cloud. These decreases were partially offset by a 23% increase in subscription revenue, on a constant currency basis, as we 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 49% and 51% for fiscal 2021 and 2020, respectively. On a constant currency basis, total revenue decreased across the Asia Pacific region and increased across the North America, Latin America and EMEA regions when compared to fiscal 2020.

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 and maintenance revenue. These decreases were offset by an 18% increase in subscription revenue, on a constant currency basis, as we 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 2021 and fiscal 2020, no single customer accounted for more than 10% of total revenue. In fiscal 2019, one customer accounted for 10% of total revenue. During fiscal 2019, we performed a large implementation project with a customer which included significant consulting services. 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 vertical 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 vertical industry for fiscal 2021, 2020 and 2019:

	Years Ended January 31, 2021	2020	2019
Automotive	31%	36%	39%
Consumer products and food and beverage	17%	15%	16%
High technology and industrial products	36%	34%	31%
Life sciences and other	16%	15%	14%
Total revenue	100%	100%	100%

The decrease in percentage of revenue for automotive in fiscal 2021 compared to fiscal 2020 and 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.

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, when and if 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 $131.1 million for fiscal 2021, representing a $24.3 million, or 23%, increase from $106.8 million for fiscal 2020. Our subscription revenue represented 43% and 35% of our total revenue in fiscal 2021 and 2020, respectively. On a constant currency basis, subscription revenue increased across all regions during fiscal 2021 when compared to the prior year. One of the metrics that management uses to monitor subscription performance is the number of new subscription deals that have been signed in the period. In fiscal 2021 we closed 95 new subscription deals, including 48 new customers and 47 conversions from existing customers who previously purchased on-premises licenses. This compared to fiscal 2020 when we closed 119 new subscription deals, including 68 new customers and 51 conversions from existing customers who previously purchased on-premises licenses. Subscription billings grew 18% in fiscal 2021 from the prior year with a three-year CAGR of 21%. Subscription backlog as of January 31, 2021 was $156.4 million, a 4% increase from $150.4 million as of January 31, 2020. 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 2021, 2020 and 2019:

	Years Ended January 31,		
	2021	**2020**	**2019**
North America	57%	56%	56%
EMEA	27%	26%	27%
Asia Pacific	10%	11%	12%
Latin America	6%	7%	5%
Total subscription revenue	100%	100%	100%

The following table presents subscription revenue by industry for fiscal 2021, 2020 and 2019:

	Years Ended January 31,		
	2021	**2020**	**2019**
Automotive	35%	36%	33%
Consumer products and food and beverage	15%	15%	18%
High technology and industrial products	28%	26%	24%
Life sciences and other	22%	23%	25%
Total subscription revenue	100%	100%	100%

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. One of the metrics that management uses to monitor subscription performance is the number of new subscription deals that have been signed in the period. In fiscal 2020 we closed 119 new subscription deals, including 68 new customers and 51 conversions from existing customers who previously purchased on-premises licenses. This compared to fiscal 2019 when we closed 97 new subscription deals, including 71 new 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 consisted of new customer sites; existing customers converting from on-premises; and additional users and modules purchased by our existing cloud customers.

We track our retention rate of subscription by calculating the annualized subscription revenue of customer sites with contracts up for renewal at the beginning of the period compared to the annualized subscription revenue associated with the customer sites that have canceled during the period. The percentage of revenue not canceled is our retention rate. Our subscription customer retention rate is in excess of 95% in each of the fiscal years 2021, 2020 and 2019. We also track net dollar retention rate for our subscription revenue, which we calculate by comparing subscription revenue of our existing customers from a year ago to subscription revenue of the same customers in the current year. Net dollar retention rate of our subscription revenue was 105% for fiscal 2021, compared to 108% for fiscal 2020. The net dollar retention rate metric calculates the additional subscription revenue generated from existing customers paying for additional users, functionality and price increases. We believe the reduction in the net dollar retention rate was a result of the global economic downturn caused by the COVID-19 pandemic as many of our customers' manufacturing facilities, supply chains and transportation modes were negatively impacted.

License Revenue. License revenue is derived from software license fees that customers pay for our software products. Our revenue mix has continued to shift from license to subscription revenue as a result of our business model transition. New customers subscribe to our cloud-based offerings rather than purchase traditional on-premises licenses. While we expect license revenue to decline over time, we continue to experience quarterly fluctuations, because most of our license revenue is now generated by existing on-premises customers adding new users and modules to their on-premises licenses.

On a constant currency basis, license revenue was $11.2 million for fiscal 2021, representing a $5.4 million, or 33%, decrease from $16.6 million for fiscal 2020. On a constant currency basis, license revenue decreased across all regions except Latin America during fiscal 2021 when compared to the prior year. We believe license revenue was negatively impacted by the COVID-19 pandemic as our existing customers were not adding users or modules as they dealt with negative impacts to their business. In addition, as more customers convert to the cloud, we expect to generate less license revenue. During fiscal 2021, nineteen customers placed license orders totaling more than $0.1 million, two of which exceeded $1 million. This compared to fiscal 2020 in which thirty-three customers placed license orders totaling more than $0.1 million, one of which exceeded $1 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 $16.6 million for fiscal 2020, representing a $8.4 million, or 34%, decrease from $25 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.

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.

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%. Conversions to the cloud are not considered cancellations for purposes of this calculation.

On a constant currency basis, maintenance revenue was $107.1 million for fiscal 2021, representing a $10.5 million, or 9%, decrease from $117.6 million for fiscal 2020. 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 2021 when compared to the prior year. The decrease in maintenance revenue period over period is primarily due to customer cancellations and continued conversions of existing customers' on-premises licenses to cloud subscriptions. 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%, some of our customers have been impacted by the pandemic and therefore, we have seen some increase in maintenance cancellations or maintenance revenue reductions. Conversions to the cloud are not considered cancellations for purposes of the renewal rate calculation.

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.

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 fiscal 2021, services projects were postponed, cancelled or extended due to the COVID-19 pandemic. In addition, we continued to execute on our strategy to increase our partner network and use more partners for services implementations and upgrades.

On a constant currency basis, professional services revenue was $58.5 million for fiscal 2021, representing a $10.0 million, or 15%, decrease from $68.5 million for fiscal 2020. On a constant currency basis, professional services revenue decreased across all regions during fiscal 2021 when compared to the prior year. The decrease is primarily related to a reduction in professional services revenue following the completion of a large, multisite global implementation project. In addition, the decrease related to fewer engagements in fiscal 2021 when compared to the prior 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.

Total Cost of Revenue

(in thousands)	Year Ended January 31, 2021	Year Ended January 31, 2020	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported	
					$	%
Cost of revenue						
Cost of subscription	$ 42,369	$ 38,451	$ (3,993)	$ 75	$ (3,918)	-10%
Cost of license	2,300	2,308	2	6	8	0%
Cost of maintenance	26,039	29,702	3,348	315	3,663	12%
Cost of professional services	54,664	69,448	14,319	465	14,784	21%
Total cost of revenue	$ 125,372	$ 139,909	$ 13,676	$ 861	$ 14,537	10%
Percentage of revenue	41%	45%				

(in thousands)	Year Ended January 31, 2020	Year Ended January 31, 2019	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported	
					$	%
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	$ 139,909	$ 155,884	$ 13,520	$ 2,455	$ 15,975	10%
Percentage of revenue	45%	47%				

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 $125.4 million and $139.0 million for fiscal 2021 and 2020, respectively and as a percentage of total revenue was 41% for fiscal 2021 and 45% for fiscal 2020. The decrease in total cost of revenue as a percentage of total revenue was mainly due to improved subscription and professional services margins and the shift of our revenue mix from professional services to subscription. The non-currency related decrease in cost of revenue of $13.6 million, or 10%, in fiscal 2021 compared to fiscal 2020 was primarily due to lower travel costs and lower salaries and related costs resulting from a decrease in headcount of 61 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 $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.

Cost of Subscription. On a constant currency basis, cost of subscription was $42.4 million for fiscal 2021, representing a $4.0 million, or 10%, increase from $38.4 million for fiscal 2020. The non-currency related increase in cost of subscription of $4.0 million in fiscal 2021 compared to fiscal 2020 was primarily due to higher hosting costs of $2.0 million, higher salaries and related costs of $1.6 million as a result of higher headcount of 19 people, and higher bonuses of $0.3 million. Cost of subscription as a percentage of subscription revenue was 32% and 36% in fiscal 2021 and 2020, 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.

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.

Cost of License. On a constant currency basis, cost of license was $2.3 million for both fiscal 2021 and fiscal 2020. Cost of license consisted primarily of amortization of capitalized software costs and royalty expense. License royalty expense as a percent of license revenue remained relatively consistent year over year. Amortization of capitalized software costs was $1.3 million in fiscal 2021 compared to $0.9 million in fiscal 2020.

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 amortization of capitalized software costs and 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 $26.0 million for fiscal 2021, representing a $3.4 million, or 11%, decrease from $29.4 million for fiscal 2020. The non-currency related decrease in cost of maintenance of $3.4 million in fiscal 2021 compared to fiscal 2020 was primarily due to lower salaries and related costs of $1.7 million as a result of lower headcount of 19 people, lower royalties of $0.7 million and lower information technology and facilities allocated costs of $0.7 million. Cost of maintenance as a percentage of maintenance revenue was 24% and 25% in fiscal 2021 and 2020, respectively.

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.

Cost of Professional Services. On a constant currency basis, cost of professional services was $54.7 million for fiscal 2021, representing a $14.3 million, or 21%, decrease from $69.0 million for fiscal 2020. The non-currency related decrease in cost of professional services of $14.3 million was primarily due to lower salaries and related costs of $6.9 million as a result of a decrease in headcount of approximately 61 people, lower travel of $4.3 million, lower information technology and facilities allocated costs of $1.6 million, lower bonuses of $1.3 million, and lower severance of $0.4 million. These lower costs were partially offset by lower cross-charges to other departments of $0.4 million. Cost of professional services as a percentage of professional services revenue was 93% for fiscal 2021 and 100% for fiscal 2020. During the pandemic we completed our consulting projects remotely and we expect to continue performing consulting engagements remotely subsequent to the pandemic.

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.

Sales and Marketing

(in thousands)	Year Ended January 31, 2021	Year Ended January 31, 2020	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
Sales and marketing	$ 71,779	$ 82,115	$ 10,540	$ (204)	$ 10,336	13%
Percentage of revenue	23%	26%				

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

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 $71.8 million for fiscal 2021, representing a $10.5 million, or 13%, decrease from $82.3 million for fiscal 2020. The non-currency related decrease in sales and marketing expense of $10.5 million in fiscal 2021 compared to fiscal 2020 was primarily due to lower travel costs of $5.4 million, lower severance of $2.2 million, lower bonuses of $1.7 million, lower customer conference costs of $0.7 million, lower professional fees of $0.6 million, lower recruiting costs of $0.5 million, lower marketing costs of $0.4 million and lower cross charges from other departments of $0.3 million. These lower costs were partially offset by higher stock-based compensation of $0.8 million and higher salaries and related costs of $0.4 million as a result of higher headcount of approximately seven people. The global pandemic resulted in savings from a significant reduction in travel and the cancellation of QAD’s Explore annual customer conference in the second quarter of fiscal year 2021.

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.

Research and Development

(in thousands)	Year Ended January 31, 2021	Year Ended January 31, 2020	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
Research and development	$ 56,084	$ 54,726	$ (1,186)	$ (172)	$ (1,358)	-2%
Percentage of revenue	18%	18%				

(in thousands)	Year Ended January 31, 2020	Year Ended January 31, 2019	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
Research and development	$ 54,726	$ 53,993	$ (1,665)	$ 932	$ (733)	-1%
Percentage of revenue	18%	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 $56.1 million for fiscal 2021, representing a $1.2 million, or 2%, increase from $54.9 million for fiscal 2020. The non-currency related increase in research and development expense of $1.2 million in fiscal 2021 compared to fiscal 2020 was primarily due to higher salaries and related costs of $1.5 million as a result of higher headcount of approximately 11 people, higher bonuses of $0.4 million and higher stock-based compensation of $0.3 million partially offset by lower travel costs of $0.6 million and a payroll tax credit of $0.6 million.

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.

General and Administrative

(in thousands)	Year Ended January 31, 2021	Year Ended January 31, 2020	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
General and Administrative	$ 41,643	$ 39,442	$ (2,407)	$ 206	$ (2,201)	-6%
Percentage of revenue	14%	13%				

(in thousands)	Year Ended January 31, 2020	Year Ended January 31, 2019	Change in Constant Currency	Change due to Currency Fluctuations	Total Change as Reported $	Total Change as Reported %
General and Administrative	$ 39,442	$ 35,248	$ (4,541)	$ 347	$ (4,194)	-12%
Percentage of revenue	13%	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 $41.6 million for fiscal 2021, representing a $2.4 million, or 6%, increase from $39.2 million for fiscal 2020. The non-currency related increase in general and administrative expense of $2.4 million in fiscal 2021 compared to fiscal 2020 was primarily due to higher stock-based compensation of $1.3 million, higher salaries and related costs of $0.7 million, as a result of higher headcount of seven people, higher legal fees of $0.4 million and higher bad debt expense of $0.4 million. These higher costs were partially offset by lower travel costs of $0.6 million. The Company increased its bad debt reserve to provide for the global economic downturn associated with COVID-19.

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.

Amortization of Intangible Assets from Acquisitions

Amortization of intangible assets from acquisitions totaled $0.3 million, $0.3 million and $0.1 million for fiscal 2021, 2020 and 2019, respectively.

Total Other Expense (Income)

(in thousands)	Year Ended January 31, 2021	Increase (Decrease) Compared to Prior Period $	Increase (Decrease) Compared to Prior Period %	Year Ended January 31, 2020	Increase (Decrease) Compared to Prior Period $	Increase (Decrease) Compared to Prior Period %	Year Ended January 31, 2019
Other expense (income)							
Interest income	$ (923)	$ (1,859)	-67%	$ (2,782)	$ 182	7%	$ (2,600)
Interest expense	591	39	6%	630	13	2%	643
Other expense (income), net	2,209	(2,141)	3,149%	68	(455)	-118%	(387)
Total other expense (income), net	$ 1,877	$ (3,961)	-190%	$ (2,084)	$ (260)	-11%	$ (2,344)
Percentage of revenue	0%			-1%			-1%

Total other expense (income), net was $1.9 million, $(2.1) million and $(2.3) million for fiscal 2021, 2020 and 2019, respectively. When comparing fiscal 2021 to fiscal 2020, the unfavorable change is primarily related to higher foreign exchange losses of $2.1 million and lower interest income of $1.9 million. The U.S. dollar versus foreign currencies exchange rates in the countries where we conduct business have fluctuated significantly since the onset of the global pandemic COVID-19, most notably versus the euro, Australian dollar, Mexican peso and British pound. 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.

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 (Benefit) Expense

(in thousands)	Year Ended January 31, 2021	Increase (Decrease) Compared to Prior Period $	Increase (Decrease) Compared to Prior Period %	Year Ended January 31, 2020	Increase (Decrease) Compared to Prior Period $	Increase (Decrease) Compared to Prior Period %	Year Ended January 31, 2019
Income tax (benefit) expense	$ (244)	$ (12,589)	-102%	$ 12,345	$ 10,856	729%	$ 1,489
Percentage of revenue	0%			4%			1%
Effective tax rate	-2%			-343%			12%

We recorded income tax (benefit) expense of $(0.2) million, $12.3 million and $1.5 million for fiscal 2021, 2020, and 2019 respectively. QAD's effective tax rate was -2%, -343%, and 12% for fiscal 2021, 2020, and 2019, respectively. We incurred pre-tax income of $10.8 million in fiscal 2021 versus a pre-tax loss of $(3.6) million in fiscal 2020. The change in effective tax rate in fiscal 2021 was primarily due to the release of $3.5 million in valuation allowances, including $2.9 million and $0.6 million valuation allowance releases on the net deferred tax assets of the Company's Germany and Hong Kong entities, 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 increases in valuation allowances of $16.2 million, which was 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 additional valuation allowances of $5.2 million related to our U.S. entity which is fully valued.

Our effective tax rate is affected by the relative amount of our foreign earnings. In fiscal 2021, our foreign earnings were primarily generated from India and Mexico. These countries have higher statutory and effective tax rates than the U.S. Additionally, we were 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 includes provisions relating to refundable payroll tax credits, deferment of employer side social security payments, net operating loss carryback periods, alternative minimum tax (AMT) credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. During fiscal year 2021, the Company applied the provisions related to the AMT refunds and the tax technical corrections to qualified improvement property.

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, 2020 and 2019 (in thousands):

	Years Ended January 31,		
	2021	2020	2019
Total revenue	$ 307,865	$ 310,772	$ 333,016
Net income(loss)	11,065	(15,949)	10,428
Add back:			
Net interest (income) expense	(332)	(2,152)	(1,957)
Depreciation	5,334	5,198	4,734
Amortization	1,485	1,316	772
Income tax (benefit) expense	(244)	12,345	1,489
EBITDA	$ 17,308	$ 758	$ 15,466
Add back:			
Stock based compensation expense	14,192	11,354	10,122
Change in fair value of interest rate swap	93	368	51
Adjusted EBITDA	$ 31,593	$ 12,480	$ 25,639
Adjusted EBITDA margin	10%	4%	8%
Non-GAAP pre-tax income reconciliation			
Income (loss) before income tax expense	$ 10,821	$ (3,604)	$ 11,917
Add back			
Stock-based compensation expense	14,192	11,354	10,122
Amortization of purchased intangible assets	418	295	125
Change in fair value of interest rate swap	93	368	51
Non-GAAP income before income taxes	$ 25,524	$ 8,413	$ 22,215

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, 2021, our principal sources of liquidity were cash and equivalents totaling $142.5 million and net accounts receivable of $82.6 million. Our cash and equivalents consisted of current bank accounts, registered money market funds and time delineated deposits. Approximately 84% of our cash and equivalents were held in U.S. dollar denominated accounts as of January 31, 2021.

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 58% and 69% as of January 31, 2021 and January 31, 2020, 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, 2021, 2020 and 2019, respectively.

	Years Ended January 31,		
(in thousands)	**2021**	**2020**	**2019**
Net cash provided by operating activities	$ 32,872	$ 16,997	$ 19,007
Net cash used in investing activities	(15,906)	(5,712)	(9,258)
Net cash used in financing activities	(12,637)	(12,275)	(14,691)
Effect of foreign exchange rates on cash and equivalents	1,455	(1,706)	(2,668)
Net increase (decrease) in cash and equivalents	$ 5,784	$ (2,696)	$ (7,610)

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 $32.9 million and $17.0 million for fiscal 2021 and 2020, respectively. The increase in cash flows from operating activities was due primarily to net income of $11.1 million for fiscal 2021 compared to a net loss of $(15.9) million for fiscal 2020 partially offset by the lower 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 $9.0 million and higher negative cash flow effect of changes in assets and liabilities of $2.1 million. While our revenue has declined due to the global pandemic, we have implemented cost control initiatives such as reduced travel and discretionary spending. In addition, most of our customer events were cancelled. This has lowered expenses and preserved cash.

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 used in investing activities consisted primarily of acquisitions and capital expenditures. Capital expenditures were $1.9 million, $5.7 million and $4.3 million for fiscal 2021, 2020 and 2019, respectively. We continue to monitor our capital spending and do not believe we are delaying critical capital expenditures required to run our business. During the second quarter of fiscal 2020, the Company vacated its building located in Dublin, Ireland, and moved its operations into leased office space. The sale of the building was completed in the third quarter of fiscal 2021 for $1.5 million in proceeds. During fiscal 2021, we acquired Allocation Network GmbH in order to enhance our product offering in the Supply Chain area. The total purchase price, excluding future earn-out payments, was $14.2 million, net of cash acquired of $0.9 million, and funded entirely with cash on hand. 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 fiscal 2019 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 $6.2 million, $6.1 million and $8.7 million in fiscal 2021, 2020 and 2019, respectively, on vested restricted stock units and exercised stock appreciation rights. We made dividend payments of $5.8 million, $5.6 million and $5.5 million in fiscal 2021, 2020 and 2019, 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 47 days and 45 days as of January 31, 2021 and 2020, respectively. DSO using the average method, which is calculated utilizing the accounts receivable balance and earned revenue for the most recent quarter, was 90 days and 93 days as of January 31, 2021 and 2020, respectively. The aging of our accounts receivable as of January 31, 2021 remained consistent in comparison with the aging as of January 31, 2020. We believe our reserve methodology is adequate, our reserves are properly stated as of January 31, 2021 and the quality of our receivables remains good.

Some of our customers who have been negatively impacted by the COVID-19 pandemic have requested and may continue to request changes to payment terms. Some may also be unable to pay their receivables as they become due. We adopted ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* on February 1, 2020, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost, which includes our accounts receivables and contract assets. Our expected loss allowance methodology for accounts receivable is developed using historical collection experience, consideration of current and anticipated future economic conditions and other relevant data. For fiscal 2021, our expected loss allowance included consideration of the current and expected future economic and market conditions surrounding the COVID-19 pandemic. We recorded an increase of $0.7 million in estimated credit losses related to the impact of COVID-19 on our customers. We have not experienced any significant impact to accounts receivable quality or credit terms and the aging of our accounts receivable remained similar to the same period last year.

Contractual Obligations

In the normal course of business, QAD enters into various contractual obligations for the purchase of goods or services. Our most significant purchase obligations relate primarily to information technology infrastructure costs, multi-year hosting services agreements and costs associated with our sales and marketing events. 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. As of January 31, 2021, our contractual purchase obligations have payments of $11.9 million due in the next 12 months and $11.5 million due thereafter. These amounts exclude certain short-term contracts relating to normal recurring purchasing activity. With respect to purchase obligations that are cancelable by QAD, these amounts generally include the amounts that would have been payable if we had canceled the obligations as of January 31, 2021. We expect to fund these obligations with cash flows from operations and cash on our balance sheet.

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, $18.3 million and $18.6 million in fiscal 2021, 2020 and 2019, respectively.

Obligations Associated With Acquisitions

We estimate the fair value of the contingent consideration issued in business combinations using a Monte Carlo valuation approach, as well as unobservable inputs, such as forecasted financial information, reflecting our assessment of the assumptions market participants would use to value these liabilities. The fair value of our liability-classified contingent consideration is remeasured at each reporting period with any changes in the fair value recorded as income or expense. In connection with our acquisition of Allocation Network GmbH, we entered into an agreement that included future payments that are contingent upon achievement of certain development and earnings-based milestones. The potential undiscounted amount of all future cash payments under the contingent consideration agreements is between zero and $10.2 million as of January 31, 2021**.**

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 0.13% at January 31, 2021. 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, 2021 was $12.4 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. 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 11 “Leases” within the Notes to Consolidated Financial Statements included in Item 15 of this Annual Report on Form 10-K.

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 and technologies complementary to our business.

We are continuing to monitor the impact of COVID-19 on our operating results and liquidity and believe the global pandemic will negatively impact operating results and liquidity in fiscal 2022 until vaccines are distributed and the global economy recovers. We will continue with cost savings measures in the areas of travel and discretionary spending. Subsequent to the pandemic, we do not anticipate a return to prior spending levels in travel and are reviewing opportunities to reduce our office footprint over time. Because we have $142.5 million of cash and our only debt is the mortgage of our corporate headquarters of $12.4 million, we believe we are in a solid position to withstand the negative impacts to our revenue, operating income and liquidity. 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 a significant number of annual maintenance contacts renewed during the fourth quarter. Our fourth quarters have also historically been our strongest quarter for new business and renewals, although in recent years we have seen less of a fourth quarter effect. 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, 2021	October 31, 2020	July 31, 2020	April 30, 2020
Fiscal 2021				
Accounts receivable, net	$ 82,609	$ 39,187	$ 42,270	$ 46,572
Deferred revenue, current	125,724	85,842	95,049	102,302
Operating cash flow (1)	13,646	3,202	5,112	10,912

	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

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

OFF-BALANCE SHEET ARRANGEMENTS

As of January 31, 2021, we did not have any off-balance sheet arrangements as defined in Item 303(b)(8) 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 cloud-based subscription model and a traditional on-premises licensing model. 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. 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.

We generate revenue through subscriptions of our cloud-based software and through sales of licenses and maintenance provided to our on-premises customers. We offer professional services to both our cloud and on-premises 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 ASC 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. 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 in quarterly or annual installments and typical payment terms provide that customers make payment within 30 days of invoice. In addition, a majority of customers renew their subscription contracts annually 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. License revenue is recognized upon delivery of the license key. 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 provided to the Company's on-premises customers, 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 via our 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. 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, 2021, our revenue from sales agents and distributors was less than 15% of total subscription, license and maintenance revenue.

Management Judgments

Due to the complexity of certain contracts, the actual revenue recognition treatment required under ASC 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 ASC 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 Income (Loss).

- 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. Incremental costs related to renewals are expensed as incurred because the term of economic benefit is one year or less. 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 and sales agent fees are included in prepaid expenses and other current assets, net and other assets, net respectively, in our Consolidated Balance Sheets.

Costs to fulfill a contract are incurred upon initiation of certain services contracts and are related to initial customer setup. These costs 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 and are included in prepaid expenses and other current assets, net and other assets, net in the Company's Consolidated Balance Sheets.

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, 2021, 2020 and 2019.

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; 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 rules, 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 social security payments, net operating loss carryback periods, alternative minimum tax (AMT) credit refunds, modifications to the net interest deduction limitations and technical corrections to tax depreciation methods for qualified improvement property. During fiscal year 2021, the Company applied the provisions related to the AMT refunds and the tax technical corrections to qualified improvement property.

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 Income (Loss) 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 result 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, 2021, we had $19.9 million of deferred tax assets, net of valuation allowances and uncertain tax positions, consisting of $69.4 million of gross deferred tax assets offset by valuation allowances of $48.6 million and uncertain tax positions of $1.0 million.

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 2021 due primarily to the volatility of the euro, Australian dollar, Mexican peso 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. 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, 2021.

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 2021 approximately 49% of our revenue was denominated in foreign currencies, compared with 50% and 51% for fiscal 2020 and 2019, respectively. We also incurred a significant portion of our expenses in currencies other than the U.S. dollar; approximately 36% for fiscal 2021, 40% for fiscal 2020 and 41% for fiscal 2019. Based on a hypothetical 10% adverse movement in all foreign currency exchange rates, our revenue would be adversely affected by approximately 4% partially offset by a positive effect on our expenses of approximately 3%, and our operating income would be adversely affected by approximately 32%.

For fiscal 2021, 2020 and 2019, foreign currency transaction and remeasurement losses (gains) totaled $2.0 million, $(0.1) million and $(0.2) million, respectively, and are included in “Other expense (income), net” in our Consolidated Statements of Operations and Comprehensive Income (Loss). 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 $3.3 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 2021 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, 2021 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, 2021 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, 2021. 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, 2021, as stated in their report included in this Annual Report on Form 10-K.

(c) Changes in Internal Control over Financial Reporting

There were no 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, 2021, 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, 2021.

NAME	AGE	POSITION(S)
Anton Chilton	53	Chief Executive Officer and Director
Pamela M. Lopker	66	President and Director
Daniel Lender	54	Chief Financial Officer and Executive Vice President
Kara Bellamy	45	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.

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. Ms. Bellamy began her career working at Ernst & Young LLP. 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

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Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended January 31, 2021, 2020 and 2019	53
Consolidated Statements of Stockholders' Equity for the years ended January 31, 2021, 2020 and 2019	54
Consolidated Statements of Cash Flows for the years ended January 31, 2021, 2020 and 2019	55
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2. INDEX TO FINANCIAL STATEMENT SCHEDULES

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

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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 96.

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, 2021 and 2020, the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended January 31, 2021, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended January 31, 2021, 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, 2021 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*.

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.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of a critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Evaluation of the Company's revenue recognition assessment related to contracts with customers

As discussed in Note 2 to the consolidated financial statements, the Company determines revenue recognition through the five-step framework prescribed by ASC Topic 606 and revenue recognition treatment may be dependent on contract-specific terms. As disclosed in the consolidated statement of operations and comprehensive income (loss), the Company recorded $307.9 million of total revenues for the year ended January 31, 2021, of which $131.1 million was subscription, $11.2 million was license, $107.1 million was maintenance, and $58.5 million was professional services.

We identified the evaluation of the Company's revenue recognition assessment related to contracts with customers as a critical audit matter. Challenging auditor judgment was required to evaluate the extent of audit evidence obtained for certain new contracts or amendments of existing contracts with customers, due to the level of complexity for such contracts or amendments.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's revenue recognition process. This included controls related to the Company's identification and assessment of contract terms and conditions and the related performance obligations that impact revenue recognition for certain new or amended revenue contracts with customers. For selected revenue transactions, we read the underlying contracts and evaluated the Company's assessment of the contract terms as well as compared the amounts recognized for consistency with revenue recognition requirements.

/s/ KPMG LLP

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

Los Angeles, California
April 12, 2021

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

	January 31, 2021	January 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 142,501	$ 136,717
Accounts receivable, net of allowances of $3,340 and $2,940 at January 31, 2021 and January 31, 2020, respectively	82,609	80,968
Prepaid expenses and other current assets, net	22,923	24,952
Total current assets	248,033	242,637
Property and equipment, net of accumulated depreciation and amortization of $42,596 and $38,861 at January 31, 2021 and January 31, 2020, respectively	25,598	28,687
Lease right-of-use assets	21,016	18,329
Capitalized software costs, net	7,980	1,922
Goodwill	25,336	12,388
Deferred tax assets, net	8,526	5,834
Other assets, net	14,298	13,007
Total assets	$ 350,787	$ 322,804
Liabilities and Stockholders' Equity		
Current liabilities:		
Current portion of long-term debt	$ 527	$ 503
Lease liabilities	4,904	4,371
Accounts payable	10,898	9,840
Deferred revenue	125,724	118,413
Other current liabilities	37,431	39,900
Total current liabilities	179,484	173,027
Long-term debt	11,825	12,341
Long-term lease liabilities	17,510	14,612
Other liabilities	12,502	6,759
Total liabilities	221,321	206,739
Commitments and contingencies (Note 14)		
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 17,375,453 and 17,108,846 shares at January 31, 2021 and January 31, 2020, respectively	17	17
Class B, $0.001 par value. Authorized 4,000,000 shares; issued 3,537,380 shares at both January 31, 2021 and January 31, 2020	4	4
Additional paid-in capital	205,630	197,824
Treasury stock, at cost (207,062 and 216,378 Class B shares at January 31, 2021 and at January 31, 2020, respectively)	(3,073)	(3,226)
Accumulated deficit	(64,924)	(70,209)
Accumulated other comprehensive loss	(8,188)	(8,345)
Total stockholders' equity	129,466	116,065
Total liabilities and stockholders' equity	$ 350,787	$ 322,804

See accompanying notes to consolidated financial statements.

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

	Years Ended January 31,		
	2021	**2020**	**2019**
Revenue:			
Subscription	$ 131,133	$ 107,168	$ 91,861
License	11,152	16,570	25,568
Maintenance	107,083	117,896	122,936
Professional services	58,497	69,138	92,651
Total revenue	307,865	310,772	333,016
Costs of revenue:			
Subscription	42,369	38,451	34,128
License	2,300	2,308	2,714
Maintenance	26,039	29,702	31,307
Professional services	54,664	69,448	87,735
Total cost of revenue	125,372	139,909	155,884
Gross profit	182,493	170,863	177,132
Operating expenses:			
Sales and marketing	71,779	82,115	78,207
Research and development	56,084	54,726	53,993
General and administrative	41,643	39,442	35,248
Amortization of intangible assets from acquisitions	289	268	111
Total operating expenses	169,795	176,551	167,559
Operating income (loss)	12,698	(5,688)	9,573
Other (income) expense:			
Interest income	(923)	(2,782)	(2,600)
Interest expense	591	630	643
Other expense (income), net	2,209	68	(387)
Total other expense (income), net	1,877	(2,084)	(2,344)
Income (loss) before income taxes	10,821	(3,604)	11,917
Income tax (benefit) expense	(244)	12,345	1,489
Net income (loss)	$ 11,065	$ (15,949)	$ 10,428
Basic net income (loss) per share:			
Class A	$ 0.55	$ (0.82)	$ 0.55
Class B	$ 0.46	$ (0.69)	$ 0.46
Diluted net income (loss) per share:			
Class A	$ 0.53	$ (0.82)	$ 0.50
Class B	$ 0.45	$ (0.69)	$ 0.44
Net income (loss)	$ 11,065	$ (15,949)	$ 10,428
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustment	157	(684)	(833)
Total comprehensive income (loss)	$ 11,222	$ (16,633)	$ 9,595

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, 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, *Leases (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
Net income	—	—	—	—	—	—	—	11,065	—	11,065
Foreign currency translation adjustments	—	—	—	—	—	—	—	—	157	157
Stock award exercises	75	—	9	—	—	(2,618)	153	—	—	(2,465)
Stock compensation expense	—	—	—	—	—	14,192	—	—	—	14,192
Dividends declared ($0.288 and $0.24 per Class A and Class B share, respectively)	—	—	—	—	—	—	—	(5,780)	—	(5,780)
Restricted stock	191	—	—	—	—	(3,768)	—	—	—	(3,768)
Balance, January 31, 2021	17,375	3,537	(207)	$ 17	$ 4	$ 205,630	$ (3,073)	$ (64,924)	$ (8,188)	$ 129,466

See accompanying notes to consolidated financial statements.

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

	Years Ended January 31,		
	2021	**2020**	**2019**
Cash flows from operating activities:			
Net income (loss)	$ 11,065	$ (15,949)	$ 10,428
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	6,829	6,412	5,517
Amortization of costs capitalized to obtain and fulfill contracts	4,923	4,455	4,176
Provision for doubtful accounts and sales adjustments	1,220	485	1,752
Amortization of right-of-use assets	5,881	5,964	—
Loss on disposal of property and equipment	318	78	34
Net change in valuation allowance	(3,438)	16,179	3,224
Other deferred income taxes	(218)	(6,497)	(4,677)
Change in fair value of a derivative instrument	93	368	51
Stock compensation expense	14,192	11,354	10,122
Other, net	58	59	—
Changes in assets and liabilities, net of effects from acquisitions:			
Accounts receivable	(848)	(924)	(1,515)
Costs capitalized to obtain and fulfill contracts	(5,469)	(5,792)	(4,130)
Prepaid expenses and other assets	1,258	(413)	(2,890)
Lease liabilities	(5,378)	(6,077)	—
Accounts payable	589	151	(4,369)
Deferred revenue	2,386	6,074	3,031
Other liabilities	(589)	1,070	(1,747)
Net cash provided by operating activities	32,872	16,997	19,007
Cash flows from investing activities:			
Purchase of property and equipment	(1,933)	(5,671)	(4,340)
Acquisition of businesses, net of cash acquired	(14,203)	—	(2,655)
Capitalized software costs	(1,268)	(1,243)	(1,067)
Proceeds from sale of building	1,496	—	—
Purchase of short-term investments	—	(1,200)	(1,200)
Proceeds from sale of short-term investments	—	2,400	—
Other, net	2	2	4
Net cash used in investing activities	(15,906)	(5,712)	(9,258)
Cash flows from financing activities:			
Repayments of debt	(624)	(530)	(468)
Dividends paid	(5,780)	(5,617)	(5,479)
Tax payments related to stock awards	(6,233)	(6,128)	(8,744)
Net cash used in financing activities	(12,637)	(12,275)	(14,691)
Effect of exchange rates on cash and equivalents	1,455	(1,706)	(2,668)
Net increase (decrease) in cash and equivalents	5,784	(2,696)	(7,610)
Cash and equivalents at beginning of year	136,717	139,413	147,023
Cash and equivalents at end of year	$ 142,501	$ 136,717	$ 139,413
Supplemental disclosure of cash flow information:			
Cash paid during the period for:			
Interest	$ 568	$ 610	$ 608
Income taxes, net of refunds	3,459	3,679	3,475

See accompanying 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 management 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:

- revenue recognition;
- 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 and intangible assets; and
- the recognition, measurement and valuation of deferred income taxes.

The World Health Organization declared in March 2020 that the outbreak of the coronavirus disease named COVID-19 constituted a pandemic, which lasted through the rest of fiscal 2021 and beyond. 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 income (loss), 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 losses (gains) for fiscal 2021, 2020 and 2019 totaled $2.0 million, $(0.1) million, and $(0.2) million, respectively, and are included in "Other expense (income), net" in the accompanying Consolidated Statements of Operations and Comprehensive Income (Loss).

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, 2021 and 2020, 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.

ACCOUNTS RECEIVABLE, NET

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

	2021	2020
	(in thousands)	
Accounts receivable	$ 85,949	$ 83,908
Less allowance for:		
Doubtful accounts	(1,101)	(543)
Sales adjustments	(2,239)	(2,397)
Accounts receivable, net	$ 82,609	$ 80,968

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. Our expected loss allowance methodology is developed using historical collection experience, consideration of current and anticipated future economic conditions and other relevant data. 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.

SALE OF BUILDING

During the second quarter of fiscal 2020, the Company vacated its building located in Dublin, Ireland, and moved its operations into leased office space. The sale of the building was completed in the third quarter of fiscal 2021 for $1.5 million in proceeds.

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 years ended January 31, 2021 and 2020. In the fiscal year ended January 31, 2019 one customer accounted for 10% 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%.In addition, no single customer accounted for 10% or more of accounts receivable at January 31, 2021 or 2020.

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:

	2021	2020
	(in thousands)	
Buildings and building improvements	$ 29,562	$ 29,902
Computer equipment and software	18,858	18,345
Furniture and office equipment	8,174	8,004
Leasehold improvements	7,685	7,382
Land	3,850	3,850
Automobiles	65	65
	68,194	67,548
Less accumulated depreciation and amortization	(42,596)	(38,861)
	$ 25,598	$ 28,687

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

	2021	2020
	(in thousands)	
Cost		
Balance at February 1	$ 67,548	$ 68,794
Additions	1,933	5,671
Adjustments (1)	196	(2,234)
Disposals	(2,062)	(4,286)
Impact of foreign currency translation	579	(397)
Balance at January 31	68,194	67,548
Accumulated depreciation		
Balance at February 1	(38,861)	(39,173)
Depreciation	(5,011)	(5,034)
Adjustments (1)	(71)	880
Disposals	1,744	4,207
Impact of foreign currency translation	(397)	259
Balance at January 31	(42,596)	(38,861)
Property and equipment, net at January 31	$ 25,598	$ 28,687

(1) Fiscal 2020 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 2021, 2020 and 2019 was $5.2 million, $5.1 million, and $4.7 million, respectively.

CAPITALIZED SOFTWARE COSTS

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. In addition, 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).

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:

	2021	2020
	(in thousands)	
Capitalized software costs:		
Capitalized software development costs	$ 3,655	$ 3,356
Acquired software technology	6,191	135
	9,846	3,491
Less accumulated amortization	(1,866)	(1,569)
Capitalized software costs, net	$ 7,980	$ 1,922

The Company‘s capitalized software development costs relate to translations and localizations of QAD Adaptive Applications. Acquired software technology costs primarily relate to intellectual property purchased during the fourth quarter of fiscal 2021.

It is the Company’s policy to write off capitalized software development costs once fully amortized. Accordingly, during fiscal 2021, $1.0 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 2021.

Amortization of capitalized software costs for fiscal 2021, 2020 and 2019 was $1.3 million, $0.9 million and $0.6 million, respectively and was included in “Cost of license” in the accompanying Consolidated Statements of Operations and Comprehensive Income (Loss).

The following table summarizes the estimated amortization expense relating to the Company’s capitalized software costs as of January 31, 2021:

Fiscal Years	(in thousands)
2022	$ 2,276
2023	1,913
2024	1,469
2025	1,212
Thereafter	1,110
	$ 7,980

BUSINESS COMBINATION

The Company allocates the purchase price of acquired companies to the tangible and intangible assets acquired and liabilities assumed, based upon their estimated fair values at the acquisition date. The purchase price allocation process requires management to make significant estimates and assumptions, especially at the acquisition date with respect to intangible assets.

These assumptions and estimates are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. The estimates in valuing certain of the intangible assets can include, but are not limited to, discount rates, future expected cash flows from software license sales, subscriptions, support agreements, consulting contracts, margins, and customer retention rates, as well as assumptions about the period of time the assets will continue to be used in the Company's combined product portfolio.

The Company estimates the fair value of the contingent consideration issued in business combinations using a Monte Carlo valuation approach, as well as unobservable inputs, such as forecasted financial information, reflecting its assessment of the assumptions market participants would use to value these liabilities. The fair values of liability-classified contingent consideration are remeasured at each reporting period with any changes in the fair value recorded as income or expense. The potential undiscounted amount of all future cash payments under the contingent consideration agreements is between zero and $10.2 million as of January 31, 2021.

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 right-of-use (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 2021, 2020, and 2019, respectively.

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 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 Income (Loss) based on the fair values of the equity awards as measured at the grant date. The Company recognizes the impact of forfeitures on stock-based compensation expense as they occur. 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 INCOME (LOSS)

Comprehensive income (loss) 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 income (loss) are net income (loss) 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 Income (Loss).

ADVERTISING EXPENSES

Advertising costs are expensed as incurred. Advertising expenses were $0.9 million, $0.6 million and $0.7 million for fiscal years 2021, 2020 and 2019.

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 $56.1 million, $54.7 million and $54.0 million in fiscal years 2021, 2020 and 2019, respectively.

OTHER EXPENSE (INCOME), NET

The components of other expense (income), were as follows:

	Years Ended January 31,		
	2021	2020	2019
		(in thousands)	
Interest income	$ (923)	$ (2,782)	$ (2,600)
Interest expense	591	630	643
Foreign exchange losses (gains)	2,018	(50)	(229)
Change in fair value of interest rate swap	93	368	51
Other expense (income), net	98	(250)	(209)
Total other expense (income), net	$ 1,877	$ (2,084)	$ (2,344)

COMPUTATION OF NET INCOME (LOSS) PER SHARE

Net income (loss) 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 income (loss) per share:

	Years Ended January 31,		
	2021	2020	2019
	(in thousands, except per share data)		
Net income (loss)	$ 11,065	$ (15,949)	$ 10,428
Less: dividends declared	(5,780)	(5,617)	(5,479)
Undistributed net income (loss)	$ 5,285	$ (21,566)	$ 4,949
Net income (loss) per share – Class A Common Stock			
Dividends declared	$ 4,982	$ 4,827	$ 4,696
Allocation of undistributed net income (loss)	4,559	(18,519)	4,243
Net income (loss) attributable to Class A common stock	$ 9,541	$ (13,692)	$ 8,939
Weighted average shares of Class A common stock outstanding—*basic*	17,274	16,709	16,267
Weighted average potential shares of Class A common stock	748	—	1,585
Weighted average shares of Class A common stock and potential common shares outstanding—*diluted*	18,022	16,709	17,852
Basic net income (loss) per Class A common share	$ 0.55	$ (0.82)	$ 0.55
Diluted net income (loss) per Class A common share	$ 0.53	$ (0.82)	$ 0.50
Net income (loss) per share – Class B Common Stock			
Dividends declared	$ 798	$ 790	$ 783
Allocation of undistributed net income (loss)	726	(3,047)	706
Net income (loss) attributable to Class B common stock	$ 1,524	$ (2,257)	$ 1,489
Weighted average shares of Class B common stock outstanding—*basic*	3,326	3,289	3,256
Weighted average potential shares of Class B common stock	67	—	166
Weighted average shares of Class B common stock and potential common shares outstanding—*diluted*	3,393	3,289	3,422
Basic net income (loss) per Class B common share	$ 0.46	$ (0.69)	$ 0.46
Diluted net income (loss) per Class B common share	$ 0.45	$ (0.69)	$ 0.44

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,		
	2021	2020	2019
		(in thousands)	
Class A	190	2,473	325
Class B	—	221	—

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, 2021, that are of significance, or potential significance, to the Company.

Recent Accounting Pronouncements Adopted

In January 2017, the FASB issued ASU 2017-04, *Intangibles—Goodwill and Other (Topic* 350*): Simplifying the Test for Goodwill Impairment*, which eliminates "Step 2" from the goodwill impairment test. QAD adopted the new standard on February 1, 2020, the first day of fiscal 2021. The adoption of this new standard did not have an impact on QAD's 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 and contract assets. QAD adopted the new standard on February 1, 2020, the first day of fiscal 2021, using the modified retrospective approach. The adoption of this standard did not have a material impact on QAD's consolidated financial statements. The Company's expected loss allowance methodology for accounts receivable is developed using historical collection experience, consideration of current and anticipated future economic conditions and other relevant data.

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. The Company adopted the new standard on February 1, 2020, the first day of fiscal 2021. The adoption of this standard did not have a material impact on QAD's consolidated financial statements.

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. 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 new standard is effective for the Company's first quarter of fiscal year 2022. The Company will continue to evaluate the new guidance and expects that the simplification will not have a material impact on its overall financial statements.

2. REVENUE

QAD offers its software using the same underlying technology via two models: a cloud-based subscription model and a traditional on-premises licensing model. 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. Under the on-premises model, QAD sells or licenses software on a perpetual basis to customers who take possession of the software and install and maintain the software on their own hardware.

The Company generates revenue through subscriptions of its cloud-based software and sales of licenses and maintenance provided to its on-premises customers and through offering professional services to both its cloud and on-premises 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.

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 ASC 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 in quarterly or annual installments and typical payment terms provide that customers make payment within 30 days of invoice. In addition, a majority of customers renew their subscription contracts annually 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. License revenue is recognized upon the delivery of the license key. 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 provided to the Company's on-premises customers, 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, 2021, the Company's revenue from sales agents and distributors was less than 15% 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,		
	2021	2020	2019
		(in thousands)	
North America	$ 155,244	$ 151,097	$ 162,307
EMEA	93,351	90,885	96,989
Asia Pacific	39,327	46,363	51,628
Latin America	19,943	22,427	22,092
Total revenue	$ 307,865	$ 310,772	$ 333,016

The Company's revenue by industry is as follows:

	Years Ended January 31,		
	2021	2020	2019
		(in thousands)	
Automotive	$ 95,009	$ 110,900	$ 128,249
Consumer products and food and beverage	51,682	46,915	53,637
High technology and industrial products	111,056	106,807	106,658
Life sciences and other	50,118	46,150	44,472
Total revenue	$ 307,865	$ 310,772	$ 333,016

Management Judgments

Due to the complexity of certain contracts, the actual revenue recognition treatment required under ASC 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, 2021 and 2020. 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, 2021	January 31, 2020
	(In thousands)	
Contract assets, short-term (in Prepaid expenses and other current assets, net)	$ 2,014	$ 1,595
Contract assets, long-term (in Other assets, net)	103	214
Total contract assets	$ 2,117	$ 1,809
Deferred revenue, short-term	$ 125,724	$ 118,413
Deferred revenue, long-term (in Other liabilities)	2,705	2,811
Total deferred revenue	$ 128,429	$ 121,224

During the fiscal year ended January 31, 2021, the Company recognized $123.2 million of revenue that was included in the gross deferred revenue balance at the beginning of the year. 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 $309.9 million as of January 31, 2021, of which the Company expects to recognize approximately $185.1 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, 2021	January 31, 2020
	(in thousands)	
Deferred maintenance	$ 66,833	$ 69,650
Deferred subscription	55,873	45,702
Deferred professional services	2,649	2,705
Deferred license and other revenue	369	356
Deferred revenues, current	125,724	118,413
Deferred revenues, non-current (in Other liabilities)	2,705	2,811
Total deferred revenues	$ 128,429	$ 121,224

Practical Expedients and Exemptions

There are several practical expedients and exemptions allowed under ASC 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 Income (Loss).

- 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. Incremental costs related to renewals are expenses as incurred because the term of economic benefit is one year or less. The current and non-current portions of deferred commissions and sales agent fees 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, 2021 and January 31, 2020, the Company had $13.1 million and $12.3 million, respectively, of deferred commissions and sales agent fees. For the fiscal years ended January 31, 2021, 2020, and 2019, $4.3 million, $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 Income (Loss).

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, 2021 and January 31, 2020 the Company had deferred setup costs of $1.3 million and $1.4 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, 2021, 2020, and 2019, $0.6 million, $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 Income (Loss).

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, 2021, 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.

• Level 3 - The contingent liability associated with acquisitions is recorded at fair value using a Monte Carlo valuation approach, as well as inputs that are not observable in the market. This measurement includes an assessment of the probability of achieving certain cloud bookings growth milestones and discounting the amount of each potential payment accordingly.

The following table sets forth the financial assets and liabilities, measured at fair value, as of January 31, 2021 and January 31, 2020:

	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, 2021			
Money market mutual funds	$ 80,611		
Certificates of deposit	$ 9,262		
Liability related to the interest rate swap		$ (325)	
Contingent liability associated with acquisitions			$ (4,751)
As of January 31, 2020			
Money market mutual funds	$ 107,319		
Certificates of deposit	$ 14,917		
Liability related to the interest rate swap		$ (232)	

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 $52.6 million and $14.5 million at January 31, 2021 and January 31, 2020, 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.

The contingent liability associated with acquisitions is classified as part of “Other current liabilities” and “Other liabilities” in the accompanying Consolidated Balance Sheets.

There have been no transfers between fair value measurements levels during the twelve months ended January 31, 2021.

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 10 “Debt” within these Notes to Consolidated Financial Statements. The fair value of the interest rate swap is reflected as a liability in the Consolidated Balance Sheets and the change in fair value is reported in “Other expense (income), net” in the Consolidated Statements of Operations and Comprehensive Income (Loss). 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, 2021 and January 31, 2020 were as follows (in thousands):

	Liability		
		Fair Value	
	Balance Sheet Location	January 31, 2021	January 31, 2020
Derivative instrument:			
Interest rate swap	Other liabilities	$ (325)	$ (232)
Total		$ (325)	(232)

The change in fair value of the interest rate swap recognized in the Consolidated Statement of Operations and Comprehensive Income (Loss) for the twelve months ended January 31, 2021, 2020 and 2019 was $(93,000), $(368,000) and $(51,000), respectively.

4. 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 Income (Loss) 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.

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

	Years Ended January 31,		
	2021	2020	2019
		(in thousands)	
Domestic net income before income taxes	$ 7,725	$ 2,963	$ 6,562
Foreign net income (loss) before income taxes	3,096	(6,567)	5,355
Income (loss) before income taxes	$ 10,821	$ (3,604)	$ 11,917

Income tax (benefit) expense is summarized as follows:

	Years Ended January 31,		
	2021	2020	2019
		(in thousands)	
Current:			
U.S. federal	$ 997	$ 471	$ (829)
State	37	130	(13)
Foreign	2,376	2,149	3,784
Subtotal	3,410	2,750	2,942
Deferred:			
U.S. federal	3	25	79
State	6	(107)	(30)
Foreign	(3,663)	9,677	(1,502)
Subtotal	(3,654)	9,595	(1,453)
Total	$ (244)	$ 12,345	$ 1,489

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

	Years Ended January 31,		
	2021	2020	2019
		(in thousands)	
Computed expected tax expense (benefit)	$ 2,272	$ (757)	$ 2,503
State income taxes, net of federal income tax expense	272	(581)	96
Incremental tax expense from foreign operations	1,708	1,256	715
Equity compensation	(958)	(4,198)	(2,916)
Foreign withholding taxes	1,619	1,103	1,089
Net change in valuation allowance	(3,438)	16,179	3,224
Net change in uncertain tax positions	125	3	(71)
Non-deductible expenses	(41)	218	1,149
Benefit of tax credits	(2,569)	(1,719)	(3,483)
Subpart F income	611	27	101
U.S. Tax Reform (the Tax Act)	—	—	(1,312)
Rate change impact	123	867	124
Other	32	(53)	270
Total income tax (benefit) expense	$ (244)	$ 12,345	$ 1,489

When calculating QAD's income tax expense for fiscal 2021, the Company considered the Tax Cuts and Job Act (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 July 20, 2020 by the U.S. Department of Treasury. The final regulations allow taxpayers to exclude certain high-taxed income of a controlled foreign corporation from their GILTI computation on an elective basis. These regulations provide computational, definitional, and anti-avoidance rule guidance relating to the determination of a U.S. shareholder's GILTI inclusion. In fiscal year 2021, cash taxes were not impacted by GILTI since the Company has enough net operating loss carryforward to offset this liability. 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).

As of January 31, 2021, 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 $90 million at January 31, 2021. 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,	
	2021	2020
	(in thousands)	
Deferred tax assets:		
Allowance for doubtful accounts and sales adjustments	$ 700	$ 600
Accrued vacation	1,305	1,499
Tax credits	24,312	22,077
Deferred revenue	2,670	3,136
Lease liabilities	5,046	4,142
Net operating loss carryforwards	13,794	15,475
Accrued expenses - other	2,543	2,038
Other comprehensive income	3,624	1,603
Section 263(a) interest capitalization	182	190
Intellectual property	4,583	6,250
Equity compensation	4,219	3,579
Carryforward of Irish amortization	5,728	3,614
Other	718	1,767
Total deferred tax assets	69,424	65,970
Less valuation allowance	(48,571)	(50,972)
Less netting of unrecognized tax benefits against deferred tax assets	(968)	(973)
Deferred tax assets, net of valuation allowance	$ 19,885	$ 14,025
Deferred tax liabilities:		
Depreciation and amortization	(612)	(851)
Acquisition accounting basis differences	(2,514)	—
Costs to obtain and fulfill contracts	(3,081)	(3,054)
ASC 842 lease right of use assets	(4,756)	(3,931)
Other liabilities	(396)	(355)
Total deferred tax liabilities	(11,359)	(8,191)
Total net deferred tax assets	$ 8,526	$ 5,834

Valuation Allowance

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 2021, 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 2021, 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.

Based on the weight of evidence both positive and negative, the Company continued to maintain a full valuation allowance on the Irish principal's net deferred tax assets in fiscal year 2021 as the negative evidence, which consisted of a three-year cumulative loss, and future earmarked investment outweighed the positive evidence.

The valuation allowance on the Company's German and Hong Kong entities was released during fiscal 2021 after management concluded that these entities will "more-likely-than-not" be 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, 2021	January 31, 2020
U.S. federal and state	$ 30.3	$ 30.3
Irish principal	12.0	11.6
Brazil	6.1	5.7
Germany	-	2.6
Hong Kong	-	0.6
South Africa	0.2	0.2
Total valuation allowance	$ 48.6	$ 51.0

Net Operating Losses and Tax Credits

The Company has deferred tax asset net operating loss carryforwards of $13.8 million and tax credit carryforwards of $24.3 million as of January 31, 2021. The majority of the Company's net operating loss carryforwards do not expire. The following table shows the Company's credit carryforwards (in thousands):

Credit Carryforwards	January 31, 2021
Foreign tax credit	$ 6,338
Federal R&D credit	8,336
State R&D credit	9,380
AMT credit and New hire retention	258
Total credit	$ 24,312

The Company's U.S. R&D credits, California R&D credits and U.S. foreign tax credits have been valued. The Company had $14,000 of U.S. R&D tax credits that expired in October 2020 and the remaining U.S. R&D credits will begin to expire in fiscal year 2027. The majority of the Company's state and foreign R&D tax credits do not expire. The Company's foreign tax credits will begin to expire in fiscal year 2028.

Unrecognized Tax Benefits

During the fiscal year ended January 31, 2021, the Company increased its reserves for uncertain tax positions by $0.1 million. Interest and penalties on accrued but unpaid taxes are classified in the Consolidated Statements of Operations and Comprehensive Income (Loss) 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,	
	2021	2020
	(in thousands)	
Unrecognized tax benefits at beginning of the year	$ 1,171	$ 1,168
Decreases as a result of tax positions taken in a prior period	—	—
Increases as a result of tax positions taken in the prior period	130	143
Reduction as a result of a lapse of the statute of limitations	(5)	(37)
Decreases as a result of settlements with taxing authorities	—	(103)
Unrecognized tax benefit at end of year	$ 1,296	$ 1,171

All of the unrecognized tax benefits included in the Consolidated Balance Sheet at January 31, 2021 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 Income (Loss) for unpaid taxes was $22,000 for the year ended January 31, 2021. The total amount of interest and penalties accrued in the Consolidated Balance Sheet at January 31, 2021 was $0.1 million.

Audit Status and Open Statutes

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*
- France for fiscal years ended January 31, 2018, 2019 and 2020

During fiscal 2021, the Company closed the following audits with no adjustments:

- Germany for fiscal years ended January 31, 2015, 2016 and 2017
- Thailand for fiscal year ended January 31, 2018
- Mexico for fiscal years ended December 31, 2015, 2016, 2017 and 2018
- India for fiscal year ended March 31, 2018*

*QAD has had multiple audits of different subsidiaries in India. One of these audits for the fiscal year ended March 31, 2018 has been closed and another audit for the same year remains open.

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 general years open for audit as of January 31, 2021:

Jurisdiction	Years Open for Audit
U.S. federal	Fiscal year 2018 and beyond
California	Fiscal year 2017 and beyond
Michigan	Fiscal year 2017 and beyond
New Jersey	Fiscal year 2017 and beyond
Australia	Fiscal year 2017 and beyond
France	Fiscal year 2018 and beyond
India	Fiscal years 2010, 2013 and 2019
Ireland	Fiscal year 2017 and beyond
United Kingdom	Fiscal year 2020 and beyond
China	Calendar year 2016 and beyond
Mexico	Calendar year 2016 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 2021:

Declaration Date	Record Date	Payable	Dividend Class A	Dividend Class B	(in thousands)
12/14/2020	12/29/2020	1/7/2021	$ 0.072	$ 0.06	$ 1,450
9/9/2020	9/23/2020	9/30/2020	$ 0.072	$ 0.06	$ 1,451
6/11/2020	6/25/2020	7/7/2020	$ 0.072	$ 0.06	$ 1,448
4/7/2020	4/22/2020	4/29/2020	$ 0.072	$ 0.06	$ 1,431

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, 2021, 2,418,000 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.

In fiscal 2020, the Company began issuing performance stock units (PSUs) to certain executive employees under the 2016 Program. PSUs issued in the fiscal year ending 2021 are released 1/2 after each year of service for two years and are contingent upon employment with the Company and achievement of pre-determined performance objectives. PSUs issued in the fiscal year ending 2020 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-based compensation expense included in the Company's Consolidated Statements of Operations and Comprehensive Income (Loss) for the fiscal years ended January 31, 2021, 2020 and 2019:

	Years Ended January 31,		
	2021	**2020**	**2019**
		(in thousands)	
Stock-based compensation expense:			
Cost of subscription	$ 544	$ 315	$ 252
Cost of maintenance	479	540	497
Cost of professional services	1,652	1,456	1,219
Sales and marketing	2,913	2,057	2,111
Research and development	2,241	1,863	1,620
General and administrative	6,363	5,123	4,423
Total stock-based compensation expense	$ 14,192	$ 11,354	$ 10,122

RSU Information

The following table summarizes the activity for RSUs for the fiscal years ended January 31, 2021, 2020 and 2019:

	RSUs (in thousands)	Weighted Average Grant Date Fair Value
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	627	$ 39.86
Granted	350	40.50
Released (1)	(258)	35.99
Forfeited	(21)	41.67
Restricted stock at January 31, 2021	698	$ 41.56

(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, 2021, 2020 and 2019, the Company withheld 80,000 shares, 82,000 shares and 81,000 shares, respectively, for payment of these taxes. The value of the withheld shares for the fiscal years ended January 31, 2021, 2020 and 2019 were $3.4 million, $3.5 million and $4.3 million, respectively.

Total unrecognized compensation cost related to RSUs was approximately $22.4 million as of January 31, 2021. This cost is expected to be recognized over a period of approximately 2.5 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 2021 was $2.2 million.

The following table summarizes the activity for PSUs for the fiscal years ended January 31, 2021 and 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	90	$ 39.82
Granted	93	40.54
Released (1)	(21)	39.82
Forfeited	(9)	39.82
Performance stock units at January 31, 2021	153	$ 40.26

(1) The number of PSUs released includes shares withheld on behalf of employees to satisfy minimum statutory tax withholding requirements. During the fiscal year ended January 31, 2021, the Company withheld 8,000 shares for payment of these taxes. The value of the withheld shares for the fiscal year ended January 31, 2021 was $0.3 million.

Total unrecognized compensation cost related to PSUs was approximately $2.4 million as of January 31, 2021. This cost is expected to be recognized over a period of approximately 0.9 years.

SAR Information

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

	Year Ended January 31, 2019
Expected life in years	5.50
Risk free interest rate	2.80%
Volatility	31%
Dividend rate	0.54%

The following table summarizes the activity for outstanding SARs for the fiscal years ended January 31, 2021, 2020 and 2019:

	SARs (in thousands)	Weighted Average Exercise Price per Share	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
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	1,349	$ 24.86		
Granted	—	—		
Exercised	(205)	12.91		
Expired	—	—		
Forfeited	—	—		
Outstanding at January 31, 2021	1,144	$ 27.01	2.9	$ 40,971
Vested and exercisable at January 31, 2021	1,002	$ 24.28	2.5	$ 38,324

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, 2021 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, 2021. The total intrinsic value of SARs exercised in the years ended January 31, 2021, 2020 and 2019 was $6.1 million, $26.5 million and $12.4 million, respectively. The weighted average grant date fair value per share of SARs granted in the year ended January 31, 2019 was $16.99. No SARs were granted in fiscal 2021 and 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, 2021, 2020 and 2019, the Company withheld 57,000, 56,000 and 104,000 shares for payment of these taxes. The value of the withheld shares for the fiscal years ended January 31, 2021, 2019 and 2018 were $2.5 million, $2.7 million and $4.4 million, respectively.

At January 31, 2021, there was approximately $1.3 million of total unrecognized compensation cost related to unvested SARs. This cost is expected to be recognized over a weighted average period of approximately 1.0 years.

7. BUSINESS COMBINATION

Allocation Network

On December 31, 2020, the Company acquired all of the outstanding stock of Allocation Network GmbH (Allocation Network), a best-in class provider of strategic sourcing and supplier management solutions founded in 1998 and is headquartered in Munich, Germany. The total consideration of approximately $19.0 million is comprised of $14.2 million in cash, net of cash acquired, and $4.8 million in estimated fair value of contingent earnout consideration. The earnout consideration is between zero and $10.2 million based on Allocation Network's cloud bookings growth over the next three years. The Company completed the acquisition for the purpose of expanding its product offerings and driving revenue growth.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed at the acquisition date (in thousands):

Tangible assets, including cash acquired of $0.9 million	$ 3,420
Goodwill	12,785
Other intangible assets	7,751
Total assets acquired	23,956
Liabilities assumed	(1,576)
Deferred tax liability	(2,549)
Net assets acquired	$ 19,831

The Company believes the amount of goodwill resulting from the purchase price allocation is attributable to the expected synergistic benefits of being able to leverage Allocation Network's software with the Company's existing software to provide an integrated suite to the customer bases of both the Company and Allocation Network. The acquired goodwill is not deductible for tax purposes.

Identified intangible assets will be amortized to cost of subscription and operating expense based upon the nature of the asset ratably over the estimated useful life, as detailed in the table below (in thousands, except year amounts):

	Estimated useful life (years)	Fair value	Estimated annual amortization	Statement of operations classification
Software technology	5	$ 6,056	$ 1,211	Cost of subscription
Customer relationships	5	1,695	339	Amortization of intangible assets from acquisitions
		$ 7,751		

The Company has evaluated and continues to evaluate pre-acquisition contingencies relating to Allocation Network that existed as of the acquisition date. The Company has preliminarily determined that certain of these pre-acquisition contingencies are probable in nature and estimable as of the acquisition date and, accordingly, has recorded its best estimates for these contingencies as a part of the purchase price allocation. The Company continues to gather information and evaluate pre-acquisition contingencies that it has assumed. If the Company makes changes to the amounts recorded or identifies additional pre-acquisition contingencies during the remainder of the measurement period, such amounts recorded will be recorded as adjustments to the purchase price allocation.

The financial results of Allocation Network are included in the Consolidated Financial Statements from the date of acquisition. Pro forma information has not been presented for operations of Allocation Network as the impact was not material to the Company's Consolidated Financial Statements.

8. GOODWILL AND INTANGIBLE ASSETS

Goodwill

The changes in the carrying amount of goodwill for the fiscal years ended January 31, 2020 and 2021 were as follows:

	Gross Carrying Amount	Accumulated Impairment	Goodwill, Net
		(in thousands)	
Balance at January 31, 2019	$ 28,031	$ (15,608)	$ 12,423
Impact of foreign currency translation	(35)	—	(35)
Balance at January 31, 2020	$ 27,996	$ (15,608)	$ 12,388
Additions	12,785		12,785
Impact of foreign currency translation	163	-	163
Balance at January 31, 2021	$ 40,944	$ (15,608)	$ 25,336

Additions to goodwill for the fiscal year ended January 31, 2021 were the result of the acquisition of Allocation Network GmbH where the purchase price exceeded the estimated fair value of the acquired net assets.

During each of the fourth quarters of fiscal 2021, 2020 and 2019, 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 2021, 2020 and 2019. The Company did not identify any events or changes in circumstances since the performance of its annual goodwill impairment test that would require the performance another goodwill impairment test during the fiscal year.

Intangible Assets

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

	2021	2020
	(in thousands)	
Amortizable intangible assets:		
Customer relationships	$ 3,039	$ 1,379
Less accumulated amortization	(681)	(394)
Net amortizable intangible assets	$ 2,358	$ 985

The Company's intangible assets are related to acquisitions completed in the second and third quarters of fiscal 2019 and in the fourth quarter of fiscal 2021. 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, $0.3 million and $0.1 million for fiscal 2021, 2020 and 2019, respectively. The following table summarizes the estimated amortization expense relating to the Company's intangible assets as of January 31, 2021:

Fiscal Years	(in thousands)
2022	$ 605
2023	608
2024	495
2025	339
Thereafter	311
	$ 2,358

9. OTHER BALANCE SHEET ACCOUNTS

	January 31,	
	2021	2020
	(in thousands)	
Prepaid expenses and other current assets, net		
Deferred cost of revenue	$ 8,052	$ 8,096
Prepaid expenses	5,228	6,140
Capitalized costs to obtain a contract, net	4,421	3,961
Assets held for sale	-	1,634
Contract assets	2,014	1,595
VAT receivable	100	1,174
Capitalized costs to fulfill a contract, net	513	543
Income tax receivable, net of payables	1,686	963
Other	909	846
	$ 22,923	$ 24,952
Other assets, net		
Long-term capitalized costs to obtain a contract, net	$ 8,723	$ 8,371
Long-term deposits and prepaid expenses	2,185	2,462
Other intangible assets, net	2,358	985
Long-term capitalized costs to fulfill a contract, net	828	886
Other	204	303
	$ 14,298	$ 13,007
Accounts payable		
Trade payables	$ 5,733	$ 6,155
VAT payable	5,165	3,685
	$ 10,898	$ 9,840
Other current liabilities		
Accrued commissions and bonus	$ 14,514	$ 15,023
Accrued compensated absences	8,250	8,377
Other accrued payroll	5,154	6,795
Accrued professional fees	2,419	2,628
Contingent liability associated with acquisitions	2,191	-
Accrued travel	304	1,264
Accrued contract labor	978	934
Other	3,621	4,879
	$ 37,431	$ 39,900
Other liabilities		
Long-term deferred revenue	$ 2,705	$ 2,811
Accrued termination benefits	3,564	2,600
Long-term contingent liability associated with acquisitions	2,560	-
Long-term accrued travel	1,854	-
Other	1,819	1,348
	$ 12,502	$ 6,759

10. DEBT

	January 31,	
	2021	2020
	(in thousands)	
Note payable	$ 12,366	$ 12,868
Less current maturities	(527)	(503)
Less loan origination costs, net	(14)	(24)
Long-term debt	$ 11,825	$ 12,341

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 0.13% at January 31, 2021. 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, 2021 was $12.4 million.

11. LEASES

The Company leases certain office space, office equipment and autos with remaining lease terms from two months to ten 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:

	January 31,	
	2021	2020
	(in thousands)	
Assets		
Operating	$ 20,689	$ 18,154
Finance	327	175
Total lease assets, net	$ 21,016	$ 18,329
Liabilities		
Current		
Operating	$ 4,784	$ 4,307
Finance	120	64
Noncurrent		
Operating	17,310	14,524
Finance	200	88
Total lease liabilities	$ 22,414	$ 18,983

The components of lease costs were as follows:

	January 31,	
	2021	2020
	(in thousands)	
Operating lease cost	$ 5,881	$ 5,963
Finance lease cost	145	58
Variable lease cost	1,362	1,447
Short-term lease cost	141	229
Total lease cost	$ 7,529	$ 7,697

Lease term and discount rate (all leases) were as follows:

	January 31,	
	2021	2020
Weighted-average remaining lease term (in years)	5.5	5.9
Weighted-average discount rate	4.84%	5.79%

Supplemental disclosures of cash flow information related to leases were as follows:

	January 31,	
	2021	2020
	(in thousands)	
Cash flows related to lease liabilities		
Operating cash flows related to operating lease liabilities	$ (5,378)	$ (6,077)
Financing cash flows related to finance lease liabilities	(119)	(47)
Total cash flows related to lease liabilities	$ (5,497)	$ (6,124)
Non-cash items		
Leased assets obtained in exchange for new operating lease liabilities	$ 6,570	$ 10,419
Leased assets obtained in exchange for new finance lease liabilities	290	222
Total non-cash items	$ 6,860	$ 10,641

Maturities of lease liabilities were as follows as of January 31, 2020 and 2021 (in millions):

Within 1 year	$ 5.9	$ 5.2
2 years	5.3	4.0
3 years	4.3	3.2
4 years	3.2	2.6
5 years	2.6	2.2
Thereafter	4.5	5.5
Total lease payments	$ 25.8	$ 22.7
Less: Imputed interest	(3.4)	(3.7)
Present value of lease liabilities	$ 22.4	$ 19.0

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 one month to six months. These lease agreements provide for a fixed base rent and automatically renew for periods from one month to six months 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 2021, the Company received $0.3 million of lease income from company-owned locations.

12. 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, 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	$ (8,345)
Other comprehensive income before reclassifications	157
Amounts reclassified from accumulated other comprehensive loss	—
Net current period other comprehensive income	157
Balance as of January 31, 2021	$ (8,188)

During fiscal 2021 and fiscal 2020 there were no reclassifications from accumulated other comprehensive loss.

13. 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 of service over four years of service. The Company's contributions for fiscal years 2021, 2020 and 2019 were $2.2 million, $2.1 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 $4.1 million for fiscal 2021, $4.7 million for fiscal 2020 and $5.3 million for fiscal 2019.

14. COMMITMENTS AND CONTINGENCIES

Purchase Obligations

At January 31, 2021, the Company had $23.4 million of other non-cancelable contractual obligations, related to the purchase of goods and services for periods through fiscal 2025.

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.

15. 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 ASC 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,		
	2021	2020	2019
		(in thousands)	
Revenue:			
North America (1)	$ 155,244	$ 151,097	$ 162,307
EMEA	93,351	90,885	96,989
Asia Pacific	39,327	46,363	51,628
Latin America	19,943	22,427	22,092
	$ 307,865	$ 310,772	$ 333,016

(1) Sales into Canada accounted for 2% of North America total revenue for each of the fiscal years 2021, 2020 and 2019.

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

	January 31,	
	2021	2020
	(in thousands)	
Property and equipment, net:		
North America	$ 21,358	$ 23,439
EMEA	2,792	3,262
Asia Pacific	1,307	1,674
Latin America	141	312
	$ 25,598	$ 28,687

16. QUARTERLY INFORMATION (Unaudited)

	Quarters Ended			
	April 30	July 31	Oct. 31	Jan. 31
	(in thousands, except per share data)			
Fiscal 2021				
Total revenue	$ 74,147	$ 74,081	$ 76,660	$ 82,977
Total costs and expenses	75,080	71,768	72,593	75,726
Gross margin	41,722	43,258	46,005	51,508
Operating (loss) income	(933)	2,313	4,067	7,251
Net (loss) income	(410)	60	3,213	8,202
Basic net (loss) income per share				
Class A	$ (0.02)	$ 0.00	$ 0.16	$ 0.41
Class B	(0.02)	0.00	0.13	0.34
Diluted net (loss) income per share				
Class A	$ (0.02)	$ 0.00	$ 0.16	$ 0.39
Class B	(0.02)	0.00	0.13	0.33
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

17. SUBSEQUENT EVENT

On April 5, 2021, QAD acquired Foreign-Trade Zone Corporation (FTZ Corp.), a leading provider of cloud-based Foreign-Trade Zone software and consulting services based in Mobile, Alabama, for up to $18 million in cash. The purchase price includes an upfront payment of $13 million; a sellers' note of $2.4 million payable over four years; and a performance earn-out based on FTZ Corp.'s cloud bookings growth over the next three years.

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

	Balance at Beginning of Period	Charged to Statements of Operations and Comprehensive Income (Loss)	Write-Offs, Net of Recoveries	Impact of Foreign Currency Translation and Other	Balance at End of Period
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	$ 1,763	$ 1,752	$ (549)	$ (65)	$ 2,901
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	$ 2,901	$ 485	$ (400)	$ (46)	$ 2,940
Year ended January 31, 2021					
Allowance for bad debt	$ 543	$ 479	$ (5)	$ 84	$ 1,101
Allowance for sales adjustments	2,397	741	(1,019)	120	2,239
Total allowance for doubtful accounts	$ 2,940	$ 1,220	$ (1,024)	$ 204	$ 3,340

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 (Incorporated by reference to Exhibit 4.2 of the Registrant's Annual Report on Form 10-K for the fiscal year ended January 31, 2020)
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)

EXHIBIT NUMBER	EXHIBIT TITLE
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)
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	Inline XBRL Instance Document*
101.SCH	Inline XBRL Taxonomy Extension Schema Document*
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document*
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document*
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document*
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document*
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* 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 12, 2021.

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.

Signature	Title	Date
/s/ Anton Chilton Anton Chilton	Chief Executive Officer, Director (Principal Executive Officer)	April 12, 2021
/s/ Pamela M. Lopker Pamela M. Lopker	President, Director	April 12, 2021
/s/ Daniel Lender Daniel Lender	Executive Vice President, Chief Financial Officer (Principal Financial Officer)	April 12, 2021
/s/ Kara Bellamy Kara Bellamy	Sr. Vice President, Corporate Controller (Chief Accounting Officer)	April 12, 2021
/s/ Scott J. Adelson Scott J. Adelson	Director	April 12, 2021
/s/ Kathleen M. Crusco Kathleen M. Crusco	Director	April 12, 2021
/s/ Peter R. van Cuylenburg Peter R. van Cuylenburg	Chairman of the Board	April 12, 2021
/s/ Lee D. Roberts Lee D. Roberts	Director	April 12, 2021

Exhibit 21.1

QAD Inc.

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

Subsidiary Name.	Country of Organization
QAD Australia Pty. Limited	Australia
QAD Europe NV/SA	Belgium
QAD Eire 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
Allocation Network 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 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

Exhibit 23.1

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 12, 2021, with respect to the consolidated balance sheets of QAD Inc. as of January 31, 2021 and 2020, the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for each of the years in the three-year period ended January 31, 2021, 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, 2021, which report appears in the January 31, 2021 annual report on Form 10-K of QAD Inc.

Our report on the 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*.

(signed) KPMG LLP

Los Angeles, California
April 12, 2021

Exhibit 31.1

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 12, 2021

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

Exhibit 31.2

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 12, 2021

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

Exhibit 32.1

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, 2021 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 12, 2021

By: /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, 2021 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 12, 2021

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