Risk Factors Comparison 2024-05-16 to 2023-05-16 Form: 10-K

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In addition to the other information in this report, the following factors should be considered carefully in evaluating NetScout and our business. You should carefully consider the risks and uncertainties described below, together with the information included elsewhere in this Annual Report on Form 10- K and other documents we file with the SEC. The risks and uncertainties described below are those that we have identified as material but are not the only risks and uncertainties facing us. Our business is also subject to general risks and uncertainties that affect many other companies. Additional risks and uncertainties not currently known to us or that we currently believe are immaterial may also impair our business, including our results of operations, liquidity, and financial condition. Because of the following factors, as well as other variables affecting our results of operations, past financial performance may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. Risks Related to Our Business and Industry Unfavorable conditions in our industry **,** ~~or~~ **our customers industries,** the global economy, or reductions in information technology spending, could limit our ability to grow our business and negatively affect our results of operations. Unfavorable conditions in the economy both in the United States and abroad, including conditions resulting from financial and credit market fluctuations, ~~increased~~ **high** interest rates, elevated or prolonged inflation, bank failures, international trade relations, political turmoil, natural catastrophes, outbreaks of contagious diseases, warfare, including in Ukraine **and the Middle East** , and terrorist attacks on the United States, Europe, the Asia Pacific region or elsewhere, could cause a decrease in business investments, including spending on information technology, and negatively affect the growth of our business and our results of operations. Heightened inflation has also increased, and could continue to further increase, the cost of operating our business and impact our customers' spending decisions, which could negatively affect our results of operations. Our competitors, many of whom are larger and have greater financial resources than we do, may respond to challenging market conditions by lowering prices in an attempt to attract our customers and may be less dependent on key industry events to generate sales for their products. In addition, we serve certain industries that have historically been cyclical and have experienced periodic downturns that have had a material adverse impact on demand for the products, software, and services that we offer. Many of our customers are concentrated in certain industries, including financial services, public sector, healthcare, and the service provider market. Furthermore, the increased pace of consolidation in certain industries may result in reduced overall spending on our products and solutions. We cannot predict the timing, strength, or duration of any economic slowdown, instability, or recovery, generally or how any such event may impact our business. Potential product vulnerabilities or critical security defects, prioritization decisions regarding remedying vulnerabilities or security defects, or customers not deploying security releases or deciding not to upgrade products, services, or solutions could result in claims of liability against us, damage our reputation, or otherwise harm our business. The products and services we sell or license to customers, including our cloud- based solutions and our service offerings, may contain vulnerabilities or critical security defects which have not been identified or remedied. We may also make prioritization decisions in determining which vulnerabilities or security defects to fix, and the timing of these fixes, which could result in exploitation that compromises security. Customers also sometimes need to test security releases before they can be deployed, which can delay implementation. In addition, we rely on third- party providers of software and cloud- based services, and we cannot control the rate at which they remedy vulnerabilities. Customers may also not deploy a security release or decide not to upgrade to the latest versions of our products or services leaving them vulnerable. If our products contain errors or quality issues, such issues may be costly to correct, revenue may be delayed, we could be sued, and our reputation could be harmed. Our products are inherently complex, and, despite our quality assurance processes and testing by our customers and us, errors or quality issues may be found in our products after commencement of commercial shipments, especially when products are first introduced or when new versions are released. These errors may result from components supplied by third parties incorporated into our products, which makes us dependent upon the cooperation and expertise of such third parties for the diagnosis and correction of such errors. If errors are discovered, we may not be able to correct them in a timely manner or at all. In addition, we may need to make significant expenditures to eliminate errors and failures. Errors and failures in our products could result in loss of or delay in market acceptance of our products and could damage our reputation. Regardless of the source of these defects or errors, we may need to divert the attention of our engineering personnel from our product development efforts to address the detection and correction of these errors and defects. If one or more of our products fail, a customer may assert warranty and other contractual claims for substantial damages against us. Our contracts with customers contain provisions relating to warranty disclaimers and liability limitations, which may not be upheld. Defending a lawsuit, regardless of its merit, is costly and may divert management' s attention and harm the market' s perception of us and our products. In addition, if our business liability insurance coverage proves inadequate or future coverage is unavailable on acceptable terms or at all, our business, operating results, and financial condition could be adversely impacted. The occurrence or discovery of these types of errors or failures could have a material and adverse impact on our business, operating results, and financial condition. Any such errors, defects, or security vulnerabilities could also adversely affect the market' s perception of our products and business. If our information technology systems ~~or data~~ , or those of third parties ~~upon which~~ **with whom** we ~~rely~~ **work** , **or data** are or were compromised, we could experience adverse consequences resulting from such compromise, including but not limited to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business operations; reputational harm; loss of revenue or profits; and other adverse consequences. ~~We~~ **In the ordinary course of business, we** and the third parties ~~upon which~~ **with whom** we ~~rely~~ **work** collect, receive, use, store, generate, transfer, dispose of, transmit, share, and process **(collectively" process")** sensitive, proprietary, and confidential information, including personal information, business data, trade secrets, intellectual property, and confidential third- party data **(collectively" sensitive data"). As a result, we and the third parties with whom we work face a variety of evolving threats that could cause security incidents** . Cyber- attacks, malicious internet- based activity, online and offline fraud, and similar activities threaten the confidentiality, integrity, and availability of our sensitive **data** ~~, proprietary, or confidential information~~ and information technology systems, and those of the third parties ~~upon which~~ **with whom** we ~~rely~~ **work** . Such threats are prevalent and continue to rise, are increasingly difficult to detect, and come from a variety of sources, including traditional computer ~~“~~ **"** hackers **"** , ~~”~~ threat actors, ~~“~~ **"** hacktivists **"** , ~~”~~ organized criminal threat actors, personnel (such as through theft or misuse **or unintentional disclosure**), sophisticated nation states, and nation- state- supported actors. Some actors now engage, and are expected to continue to engage, in cyber- attacks, including **without limitation nation- state actors** for geopolitical reasons and in conjunction with military conflicts and defense activities. During times of war and other major conflicts, we and the third parties ~~upon which~~ **with whom** we ~~rely~~ **work** may be vulnerable to heightened risk of these attacks, including retaliatory cyber- attacks that could materially disrupt our systems and operations, supply chain, and ability to produce, sell and distribute our goods and services. We and the third parties ~~upon which~~ **with whom** we ~~rely~~ **work** are subject to a variety of evolving threats, including but not limited to social- engineering attacks (including through phishing attacks), malicious code (such as viruses and worms), malware (including as a result of advanced persistent threat intrusions), denial- of- service attacks **,** ~~(such as~~ credential stuffing ~~)~~, credential harvesting, personnel misconduct or error, ransomware attacks, supply- chain attacks, software bugs, server malfunctions, software or hardware failures, loss of data or other information technology assets, telecommunications failures, **earthquakes, fires, floods,** and other similar threats **, including attacks enhanced or facilitated through the use of Artificial Intelligence (" AI")** . Severe ransomware attacks are also ~~becoming increasingly~~ prevalent and could lead to significant interruptions in our operations, **ability to provide our products or services,** loss of sensitive data and income, reputational harm, and diversion of funds **for us and our customers. Additionally, future or past business transactions could expose us to additional cybersecurity risks, as our systems could be negatively affected by vulnerabilities present in acquired or integrated systems or technologies. Security issues not previously discovered during due diligence may arise in such systems or technologies** . In addition, our reliance on third **parties** ~~- party service providers~~ could introduce cybersecurity risks and vulnerabilities, including supply- chain attacks, and other threats to our business operations. For example, we rely on third parties **and technologies** to operate some of our business systems and process sensitive **data** ~~, proprietary, and confidential information~~ in a variety of contexts, including, without limitation, cloud- based infrastructure, data center facilities, encryption and authentication technology, employee email, content delivery to customers, and other functions. We also rely on third- party service providers to provide other products, services, **or** parts **to our customers** , or otherwise to operate our business. ~~Our~~ **While we have instituted a third- party risk management process that is designed to account for third party specific risks, our** ability to monitor these third parties ~~’~~ **'** information security practices is limited **.** ~~, and these third~~ **Third** parties may not ~~have adequate~~ **sufficiently maintain their** information security measures **or may change them without our knowledge or delay notification to us** in ~~place~~ **a timely manner** . If ~~our~~ third ~~- party service providers~~ **parties with whom we work** experience a security incident or other interruption, we could experience adverse consequences. In addition, supply- chain attacks have increased in frequency and severity, and we cannot guarantee that third parties ~~’~~ **'** infrastructure in our supply chain or **the** ~~our third- party partners’~~ supply chains **of third parties with whom we work** have not been compromised. While we may be entitled to damages if ~~our~~ **a** third ~~-~~ party ~~service providers~~ **with whom we work** ~~fail~~ **fails** to satisfy their data privacy or security- related obligations to us, we cannot be certain that our applicable contracts with these third parties will adequately limit our data **privacy or** security- related liability to them or others, be sufficient to allow us to obtain indemnification or recovery from them for data **privacy or** security- related liabilities **we incur** that ~~they~~ **are** ~~cause~~ **caused by them** ~~us to incur~~ , or be sufficient to cover **all or any of** our damages. Although we have multiple and layered controls and security measures in place designed to prevent **and detect** cyberattacks, experienced computer hackers are increasingly organized and sophisticated and we cannot guarantee that our ~~, or our third- party partners’,~~ security measures will be sufficient to protect against unauthorized access to our IT networks, software and systems. Malicious attack efforts operate on a large- scale and sometimes offer targeted attacks as a paid- for service. In addition, the techniques used to obtain access or sabotage networks change frequently, and we may be unable to anticipate such techniques, implement adequate preventative measures, or **detect and** stop security breaches that may arise from such techniques. As a provider of security solutions, we may be a more attractive target for such attacks. Other individuals or entities, including personnel or vendors, may also intentionally or unintentionally provide unauthorized access to our IT environments. **We take steps to detect, mitigate, and remediate vulnerabilities in our information systems (such as hardware and / or software). We rely on third parties for vulnerability reporting including severity assessments that help assess prioritization in applying patches. We may not, however, detect or remediate all such vulnerabilities including on a timely basis. Further, we may experience delays in developing and deploying remedial measures and patches designed to address identified vulnerabilities. Vulnerabilities could be exploited and result in a security incident.** Any of the previously identified or similar threats could cause a security incident or other interruption that could result in unauthorized, unlawful, or accidental acquisition, modification, destruction, loss ~~, alteration~~ **alternation** , encryption, disclosure of, or access to our sensitive **data** ~~, proprietary, or confidential information~~ or our information technology systems, or those of the third parties ~~upon~~ **with** whom we ~~rely~~ **work** . A security incident or other interruption could disrupt our ability (and that of third parties ~~upon~~ **with** whom we ~~rely~~ **work**) to provide our **products and** services. **Applicable data privacy** ~~While we have implemented significant~~ and ~~multi- layered~~ security ~~measures designed~~ **obligations may require us** to ~~protect against~~ **notify relevant stakeholders, including affected individuals, customers, regulators and investors, of** security incidents, **or to implement** ~~there~~ **other requirements** ~~can be no assurance that these measures will be effective. We take steps to detect and remediate vulnerabilities~~ , ~~but we may not be able to detect~~ **such as providing credit monitoring. Such disclosures** and **compliance with such requirements** ~~remediate all vulnerabilities because~~

~~the threats and techniques used to exploit the vulnerability change frequently and~~ are **costly** ~~often sophisticated in nature. Therefore~~ , **and the disclosure or the failure to comply with** such ~~vulnerabilities~~ **requirements** could **lead** ~~be exploited but may not be detected until after a security incident has occurred. These vulnerabilities pose material risks~~ to **adverse consequences** ~~our business. Further, we may experience delays in developing and deploying remedial measures designed to address any such identified vulnerabilities~~ . If we, or a third party ~~upon~~ **with** whom we ~~rely~~ **work** , experience a security incident or are perceived to have experienced a security incident, we may experience adverse consequences, such as government enforcement actions; additional reporting, disclosure, notification and / or oversight requirements; restrictions on processing sensitive data; litigation; indemnification obligations; negative publicity; reputational harm; monetary fund diversions; interruptions in our operations (including availability of data); financial loss; and other similar harms. Security incidents and attendant consequences may cause customers to stop using our services, deter new customers from using our services, and negatively impact our ability to grow and operate our business. ~~In addition to experiencing a security incident, third parties may gather, collect, or infer sensitive, proprietary, or confidential information about us from public sources, data brokers, or other means that reveals competitively sensitive details about our organization and could be used to undermine our competitive advantage or market position.~~ Our ability to quickly and successfully recover from a disaster, public health crisis, or other business continuity event could affect our ability to deliver our products and negatively impact our business reputation. The occurrence of a natural disaster, public health crisis, or an act of **war or** terrorism, or a decision or need to close any of our facilities without adequate notice or time for making alternative arrangements could result in interruptions in the delivery of our products and services. Our central business functions, including administration, human resources, finance services, legal, development, manufacturing and customer support depend on the proper functioning of our computer, telecommunication and other technology systems and operations, some of which are operated or hosted by third parties. While we have business continuity programs in place, a disruption or failure of systems or operations because of a disaster, public health crisis or other business continuity event could cause data to be lost or otherwise delay our ability to complete sales **and provide products and services** and provide the highest level of service to our customers. In addition, we could have difficulty producing accurate financial statements on a timely basis, which could have an impact on our ability to make timely disclosures and could adversely affect the trading value of our stock. Although we endeavor to ensure there is redundancy in these systems and that they are regularly backed- up, there is no guarantee that data recovery in the event of a disaster would be effective or occur in an efficient **and timely** manner. Our operations are dependent upon our ability to protect our technology infrastructure against damage from business continuity events that could have a significant disruptive effect on our operations. We could experience material adverse interruptions to our operations or delivery of services to our clients in a disaster recovery scenario. If we fail to introduce new products and solutions or enhance our existing products and solutions to keep up with rapid technological change, demand for our products and solutions may decline. The market for application and network performance management, service assurance, cybersecurity solutions, and business intelligence is highly competitive and characterized by rapid changes in technology, evolving industry standards, changes in customer requirements, a current high level of and increasing competition, and frequent product introductions and enhancements. Our success is dependent upon our ability to meet our customers' needs, which are driven by changes in technologies, new application technologies, new security risks and the emergence of new industry standards. In addition, new technologies may shorten the life cycle for our products and solutions or could render our existing or planned products and services less competitive or obsolete. We must address demand from our customers for advancements in our products and services applications to support our customers' growing needs and requirements in complex networks. To meet this challenge and remain competitive in the market, we must introduce new enhancements and additional form factors to our existing product lines and service offerings. If we are unable to develop, introduce and communicate new network and application performance management and service assurance products, network security products, business intelligence products, and solutions or enhancements to existing products in a timely and successful manner, this inability could have a material and adverse impact on our business, operating results and financial condition. As our success depends in part on our ability to develop product enhancements and new products and solutions that keep pace with continuing changes in technology, cyber risk and customer preferences, we must devote significant resources to research and development, development and introduction of new products and enhancements on a timely basis, and obtaining market acceptance for our existing products and new products. We have introduced and intend to continue to introduce new products and solutions, including increased migration to" software as a service" and software- deployed products as well as cybersecurity products. If the introduction of these products and solutions is significantly delayed or if we are unsuccessful in bringing these products and solutions to market, our business, operating results, and financial condition could be materially and adversely impacted. We are developing and are already deploying a number of new products as well as enhancements to our existing products and offerings, including our ~~new~~ Omnis cybersecurity suite as well as additional software only solutions and products available in multiple form factors for most of our existing solutions. We must invest in research and development to remain competitive in our industry. However, there can be no assurances that continued investment and increased research and development expenses will ultimately result in our maintaining or increasing our market share, which could result in a decline in our operating results. The process of developing new solutions is complex and uncertain; we must commit significant resources to developing new services or features without knowing whether our investments will result in services or features the market will accept. If our research and development expenses increase without a corresponding increase in our revenues, it could have a material adverse effect on our operating results. Also, we may not be able to successfully complete the development and market introduction of new products or product enhancements in a timely manner. If we fail to develop and deploy new products and product enhancements on a timely basis, or if we fail to gain market acceptance of our new products, our revenues will likely decline, and we may lose market share to our competitors. Our reliance on sole source suppliers could adversely impact our business. Specific components that are necessary for the hardware assembly of our instruments are obtained from separate sole source suppliers or a limited group of suppliers **, including some with operations in locations with geopolitical uncertainty** . These components include our network interface cards and proprietary hardware. Our reliance on sole or limited suppliers involves several risks, ~~including~~ a lack of control over the manufacturing process and inventory management ~~and~~ **,** potential inability to obtain an adequate supply of required components **,** and the inability to exercise control over pricing, quality and timely delivery of components. For most of our products, we do not have the internal manufacturing capabilities to meet our customers' demands **so we rely on third parties to supplement our capabilities** . It is our practice to mitigate these risks by partnering with key suppliers, including distributors, to establish a variety of supply continuity practices. These practices may include, among other approaches, establishing buffer supply requiring suppliers to maintain adequate stocks of materials and use- based and kanban programs to set supply thresholds. We also **maintain** ~~enter into~~ escrow arrangements for certain technologies. Where possible, we use widely available off the shelf hardware and work with large suppliers with multiple factories **in diverse geographies** ~~and other risk management practices~~ . However, failure of supply, including **because** ~~as a result~~ of a public health crisis ~~or~~ **, a** geopolitical situation **, terrorism or war, sanctions or embargoes** , or failure to execute effectively on any of ~~these programs~~ **our risk mitigation practices** could result in our inability to obtain adequate supply or deliveries or to ship our products on a timely basis **or at all** . Moreover, if we are unable to continue to acquire from these suppliers on acceptable terms or should any of these suppliers cease to supply us with components for any reason, we may not be able to identify and integrate an alternative source of supply in a timely fashion or at the same costs. Any transition to one or more alternate manufacturers ~~would~~ **could** ~~likely~~ result in **significant** delays, operational problems, and increased costs, and may limit our ability to deliver our products to our customers on time for such transition period **or, in extreme circumstances, at all** . These risks could damage relationships with our current and prospective customers, cause shortfalls in expected revenue, and could materially and adversely impact our business, operating results and financial condition. Increased customer demands on our technical support services may adversely affect our relationships with our customers and our financial results. We offer technical support services with many of our products. Our customers depend on our support organization to resolve issues relating to our products deployed on their networks. A high level of support is critical for continued relationships with our customers. If we or our channel partners do not effectively assist our customers in deploying our products, succeed in helping our customers quickly resolve post- deployment issues, and provide effective ongoing support, it ~~would~~ **could** adversely affect our ability to sell our products to existing customers and ~~would~~ **could** harm our reputation with existing and potential customers. Any failure to maintain high quality support and services ~~would~~ **could** harm our operating results and reputation. Further, if customers demand these services, and we cannot adequately meet their demand, or if we cannot realize revenues in connection with our provision of services related to product support, it could have a material and adverse impact on our financial condition and results of operations. The success of our business depends, in part, on the continued growth in the market for and the continued commercial demand for service delivery, service assurance and network security solutions. We derive nearly all our revenue from the sale of products and services that are designed to allow our customers to assure the delivery of services through management of the performance and network security of applications across IP networks. We have ~~actively~~ expanded our operations in the past through acquisitions and organic growth and may continue to expand them in the future to gain share in the evolving markets in which we operate. Therefore, we must be able to predict the appropriate features and prices for future products to address the market, the optimal distribution strategy, and the future changes to the competitive environment. For us to be successful, our potential customers must recognize the value of more sophisticated application management and network security solutions, decide to invest in the management of their networked applications and, in particular, adopt our management solutions. Any failure of this market to continue to be viable would materially and adversely impact our business, operating results, and financial condition. Additionally, businesses may choose to outsource the operations and management of their networks to managed service providers. Our business may depend on our ability to continue to develop relationships with these service providers and successfully market our products to them. Failure to manage growth properly and to implement enhanced automated systems could adversely impact our business. The growth in size and complexity of our business and our customer base has been and will continue to be a challenge to our management and operations. Additional growth will place significant demands on our management, infrastructure, and other resources. To manage further growth effectively, we must hire, integrate, and retain highly skilled personnel qualified to manage our expanded operations. We will also need to maintain and continually improve our financial and management controls, reporting systems, and procedures as our business grows and evolves over time. If we are unable to manage our growth effectively, our costs, the quality of our products, the effectiveness of our sales organization, attraction and retention of key personnel, our business, our operating results and financial condition could be materially and adversely impacted. To manage our growth effectively, we may need to implement new or enhanced automated infrastructure technology and systems. Any disruptions or ineffectiveness relating to our systems implementations and enhancements could adversely affect our ability to process customer orders, ship products, provide services and support to our customers, bill and track our customers, fulfill contractual obligations, and otherwise run our business. Most of our employees are based outside of our headquarters and many of our employees work remotely, entirely or in part. If we are unable to appropriately increase management depth and enhance succession planning, we may not be able to achieve our near- and long-term financial or operational goals. It is also important to our continued success that we hire qualified employees, properly train them and manage out poorly performing personnel, all while maintaining our corporate culture and spirit of innovation. If we are not successful at these efforts, our growth and operations could be adversely affected. As our business evolves, we must also expand and adapt our information technology (IT) and operational infrastructure. Our business relies on our data systems, billing systems and other operational and financial reporting and control systems. ~~All these~~ **These** systems have become increasingly complex due to the diversification and complexity of our business and acquisitions of new businesses with different systems. To manage our technical support infrastructure effectively and improve our sales efficiency, we will need to continue to upgrade and improve our data systems, billing systems, ordering processes, customer relationship management systems, and other operational and financial systems, procedures and controls. These upgrades and improvements may be difficult and costly, and they may require employees to dedicate a significant amount of time to implement. If we are unable to adapt our systems and organization in a timely, efficient, and cost- effective manner to accommodate changing circumstances, our business may be adversely affected. If the third parties we rely on for **cloud- based or** hosted data solutions for our internal network and information systems are subject to a security breach or otherwise suffer disruptions that ~~impact~~ **affect** the services we utilize, the integrity and availability of our internal information could be compromised causing the loss of confidential or proprietary information, damage to our reputation and economic loss ~~. We or our suppliers may be affected by new regulations related to climate change, sustainability, and other environmental issues. We or our suppliers may become subject to new laws enacted with regards to climate change, sustainability, and other environmental issues. If new laws are enacted, or current laws are modified in countries in which we or our suppliers operate, we could face increased costs to comply with these laws. These costs may be incurred across various levels of our supply chain to comply with new environmental regulations, as well as by us in connection with our design, manufacturing, and support of products, including costs related to incorporation of substitute materials and product re- design costs~~ . Our success depends, in part, on our ability to manage and leverage our distribution channels. Disruptions to, or our failure to effectively develop and manage, these partners and the processes and procedures that support them could adversely affect our ability to generate revenues from the sale of our products and services. Managing these distribution channels and relationships requires experienced personnel, and lack of sufficient expertise could lead to a decrease in sales of our products and services, which could cause our operating results to suffer. Our future **growth and** success may require us to increase the number and use of our indirect sales efforts through our distributors and channel partners and to leverage those relationships to expand these distribution channels and to develop new indirect distribution channels to increase revenue. Our channel partners have no obligation to purchase any products from us. Some of our distribution and channel partners also distribute and sell competitive products and services and the reduction in sales of our products by these partners could materially reduce our revenues. In addition, they could internally develop products that compete with our solutions or partner with our competitors and bundle or resell competitors' solutions, possibly at lower prices. The potential inability to develop relationships with new partners in new markets, expand and manage our existing partner relationships, the unwillingness of our partners to market and sell our products effectively or the loss of existing partnerships **or experienced personnel** could have a material and adverse impact on our business, operating results and financial condition ~~. Our international operations, including our operations in the United Kingdom, mainland Europe, India, Asia- Pacific and other regions, are generally also subject to the risk of longer sales cycles through our international distribution channels~~ . Sales to customers outside the United States accounted for **43 %,** 36 %, **and** 41 ~~%, and 42~~ % of our total revenue for the fiscal years ended March 31, **2024,** 2023 ~~,~~ **and** 2022 ~~and 2021~~ , respectively. The need to develop such relationships can be particularly acute in areas outside of the U. S. Recruiting and retaining qualified channel partners and training them in the use of our technology and services and ensuring that they comply with our legal and ethical requirements requires significant time and resources throughout the relationship. Our business and operations, and the operations of our customers, partners, and / or suppliers, may be adversely affected by epidemics and pandemics ~~, such as the COVID- 19 pandemic~~ . ~~The COVID- 19 pandemic and future~~ **Future** epidemics and pandemics risk disrupting and adversely affecting our business operations and financial results, as well as the markets and communities in which we and our customers, suppliers and other business partners operate. We face risks related to epidemics, pandemics, and other outbreaks of communicable diseases that adversely affect global commercial activity, economies, financial markets, and companies. An epidemic or pandemic or other outbreak of communicable diseases ~~, such as the COVID- 19 pandemic~~ , poses the risk that we or our customers, suppliers, and other business partners may be disrupted or prevented from conducting normal business activities for certain periods of time, the durations of which are uncertain, and may otherwise experience significant impairments of business activities. For instance, ~~as has been the case with the COVID- 19 pandemic,~~ federal, state, local, and foreign governments may put in place quarantines, executive orders, shelter- in- place orders, and similar government orders and restrictions to reduce the rate of infection and control the spread of the disease. Such orders or restrictions, ~~or the perception that such orders or restrictions could occur,~~ may result in business closures, work stoppages, slowdowns and delays, travel restrictions and cancellation of events, ~~among other effects~~ that could affect productivity and disrupt our operations and those of our suppliers, customers, and business partners ~~. To protect our employees, contractors, customers, suppliers, and our local communities, and limit the effect of the COVID- 19 pandemic on our operations, for a period of time many of our employees at our locations globally worked remotely, with exceptions for site- essential personnel (with protective measures and protocols in place). On- site and work- from- home requirements and other restrictions on our employees, suppliers, customers, and business partners may change over time, whether becoming more or less restrictive, in light of the COVID- 19 pandemic or other epidemics or pandemics and global responses thereto, and we may alter our operations as a result of requirements imposed by federal, state, or local authorities, or by foreign governments in countries in which we operate, or as we otherwise determine is in the best interests of our employees, suppliers, customers, business partners, and stockholders. As part of our existing business continuity planning, we had established infrastructure and protocols to enable our employees to work from home during the pandemic. However, future increases in the number of employees working remotely may cause disruptions to our business operations, including our ability to develop and design our products and services in a timely manner or meet required milestones or customer commitments, and this could have an adverse effect on our revenue and operating results. In addition, we may determine that it is necessary to direct that employees engaged in manufacturing and support refrain from working on- site for an indeterminate period of time, and this could have an adverse effect on our revenue and operating results. Furthermore, global travel was also sharply curtailed, and in some cases prohibited, as a result of the COVID- 19 pandemic. Our sales personnel often meet with customers or prospective customers in person to provide greater personalized service. While our employees and customers adjusted to virtual meetings and have now resumed traveling at closer to normal levels, the inability of our sales personnel to meet with customers~~

~~or prospective customers at a customer facility as a result of the COVID- 19 pandemic or other epidemics or pandemics could have an adverse effect on our revenue and operating results~~. In addition, we rely on third- party suppliers and manufacturers throughout the globe, which may be impacted by ~~the COVID- 19 pandemic or other~~ epidemics or pandemics. ~~The COVID- 19 pandemic has resulted in, and future~~ **Future** epidemics or pandemics may result in ~~,~~ the ~~extended~~ shutdown of certain businesses and the closure of international borders ~~throughout the world~~, which may result in disruptions to our supply chain, including from temporary closure of third- party supplier and manufacturer facilities, interruptions in product supply or restrictions on the export or shipment of our products, as well as the import of products into countries in which we operate. These potential events could have an adverse effect on our revenues and operating results. To the extent ~~the COVID- 19 pandemic or other~~ future epidemic or pandemic adversely affects our business and financial results, it may also have the effect of heightening many of the other risks described in this" Risk Factors" section, such as those relating to our quarterly revenue and operating results, the estimates made for our critical accounting policies, and the operation of internal controls over such estimates, as well as on our liquidity and on our ability to satisfy our indebtedness obligations and debt covenants. Risks Related to Our Intellectual Property Necessary licenses for third- party technology may not be available to us on commercially reasonable terms or at all. We currently, and will in the future, license technology from third parties that we use to produce or embed in our products. While we have generally been able to license required third- party technology to date, third- party licenses required in the future may not be available to us on commercially reasonable terms or at all. If we are unable to obtain any necessary third- party licenses, we would be required to redesign our product or obtain substitute technology, which may not perform as well, be of lower quality or be more costly. The loss of these licenses or the inability to maintain any of them on commercially acceptable terms could delay development of future products or the enhancement of existing products. We may also choose to pay a premium price for such a license in certain circumstances where continuity of the licensed product would outweigh the premium cost of the license. The unavailability of these licenses or the necessity of agreeing to commercially unreasonable terms for such licenses could materially adversely affect our business, financial condition, operating results, and cash flows. Our success depends on our ability to protect our intellectual property rights. Our business is heavily dependent on our intellectual property. We rely upon a combination of patent, copyright, trademark and trade secret laws and registrations and non- disclosure and other contractual and license arrangements to protect our intellectual property rights. The reverse engineering, unauthorized copying, or other misappropriation of our intellectual property **, including intentionally or unintentionally through AI,** could enable third parties to benefit from our technology without compensating us **or make claims on our IP** . Furthermore, the laws of some foreign jurisdictions do not offer the same protections for our proprietary rights as the laws of the United States, and we may be subject to unauthorized use of our products in those countries. Legal proceedings to enforce our intellectual property rights could be burdensome and expensive and could involve a high degree of uncertainty. In addition, legal proceedings may divert management' s attention from growing our business. There can be no assurance that the steps we have taken to protect our intellectual property rights will be adequate to deter misappropriation **or loss** of proprietary information, or that we will be able to detect unauthorized use by third parties and take appropriate steps to enforce our intellectual property rights. The unauthorized copying or use of our products or proprietary information could result in reduced sales of our products and eventually harm our operating results. Others may claim that we infringe on their intellectual property rights. We are and may continue to be subject to claims by others, whether valid or not, that our products infringe on their intellectual property rights, patents, copyrights, or trademarks **. Further, intellectual property issues, such as ownership, copyright, and patentability, have not been fully settled with respect to AI technology** . These claims, whether or not valid, could require us to spend significant sums in litigation, pay damages or royalties, delay product shipments, reengineer our products, rename our products and rebuild name recognition or acquire licenses to such third- party intellectual property. We may not be able to secure any required licenses on commercially reasonable terms or secure them at all **, which could force our customers to stop using our products, or in the case of resellers and others, stop selling our products** . In some cases, we may have agreed to contract terms that indemnify our customers and partners if our products or technology infringe or misappropriate specified third party intellectual property rights; therefore, we could become involved in litigation or claims brought against our customers or partners if our products or technology are the subject of such allegations. Any of these claims or resulting events could have a material and adverse impact on our business, operating results, and financial condition. Risks Related to Our Liquidity and Financial Condition Our indebtedness may limit our operations and our use of our cash flow, and any failure to comply with the covenants that apply to our indebtedness could adversely affect our liquidity and financial condition. On July 27, 2021, we amended and extended our existing credit facility (Second Amended and Restated Credit Agreement) with a syndicate of lenders. The Second Amended and Restated Credit Agreement provides for a five- year $ 800. 0 million senior secured revolving credit facility, including a letter of credit sub- facility of up to $ 75. 0 million. We may elect to use the new credit facility for working capital purposes (including to finance the repurchase of common stock). The commitments under the Second Amended and Restated Credit Agreement will expire on July 27, 2026, and any outstanding loans will be due on that date. As of the date of this report, we had $ 100. 0 million in outstanding indebtedness under the Second Amended and Restated Credit Agreement. Our debt level can have negative consequences, including exposing us to future interest rate risk. We may incur significantly more debt in the future, and there can be no assurance that our cost of funding will not substantially increase. Our current revolving credit facility also imposes certain restrictions on us; for a more detailed description please refer to" Management' s Discussion and Analysis of Financial Condition and Results of Operations." Upon an event of default, for example, the administrative agent, with the consent of, or at the request of, the holders of more than 50 % in principal amount of the loans and commitments, may terminate the commitments and accelerate the maturity of the loans outstanding under the Second Amended and Restated Credit Agreement and enforce certain other remedies under the Second Amended and Restated Credit Agreement and other loan documents, which would adversely affect our liquidity and financial condition. If we take on additional indebtedness, the risks described above could increase. Any failure to meet our debt obligations could damage our business. Our ability to meet our obligations under the Second Amended and Restated Credit Agreement will depend on market conditions and our future performance, which is subject to economic, financial, competitive, and other factors beyond our control. If we are unable to remain profitable, or if we use more cash than we generate in the future, our level of indebtedness at such time could adversely affect our operations by limiting or prohibiting our ability to obtain financing for additional capital expenditures, acquisitions and general corporate purposes. In addition, if we are unable to make payments as required under the Second Amended and Restated Credit Agreement, we would be in default under the terms of the loans, which could seriously harm our business. If we incur significantly more debt, this could intensify the risks described above. We may fail to secure necessary additional financing. Our future success may depend in part on our ability to obtain additional financing to support our continued growth and operations and any downgrades in our credit rating could affect our ability to obtain additional financing in the future or may affect the terms of any such financing. If our existing sources of liquidity are insufficient to satisfy our operating requirements, we may need to seek to raise capital by one or more of the following: • issuing additional common stock or other equity instruments; • acquiring additional bank debt; • issuing debt securities; or • obtaining lease financings. However, we may not be able to obtain additional capital when we want or need it, or capital may not be available on satisfactory terms, including in light of current macroeconomic conditions, such as heightened inflation and increasing interest rates, stock price volatility, bank failures and the risk of a potential recession. Furthermore, any additional capital may have terms that adversely affect our business, such as new financial or operating covenants, or that may result in dilution to our stockholders. We expect that existing cash, cash equivalents, marketable securities, cash provided from operations and our bank credit facilities will be sufficient to meet ongoing cash requirements. However, our failure to generate sufficient cash as our debt becomes due or to renew credit lines prior to their expiration could materially adversely affect our business, financial condition, operating results, and cash flows. Other Risks Related to Our Business The failure to recruit and retain qualified personnel and plan for and manage the succession of key executives could hinder our ability to successfully manage our business, which could have a material adverse effect on our financial position and operating results. We operate in businesses where there is intense competition for experienced personnel in all our global markets. We depend on our ability to identify, recruit, hire, train, develop and retain qualified and effective professionals and to attract and retain talent needed to execute our business strategy. Our future success depends in large part upon our ability to attract, train, motivate and retain highly skilled employees, particularly executives, sales and marketing personnel, software engineers, and technical support personnel. The complexity of our products, software systems and services require highly trained professionals. While we presently have a sophisticated, dedicated and experienced team of employees who have a deep understanding of our business lines, the labor market for these individuals has historically been very competitive due to the limited number of people available with the necessary technical skills and understanding. If we are unable to attract and retain the highly skilled technical personnel that are integral to our sales, marketing, product development and technical support teams, the rate at which we can generate sales and develop new products or product enhancements may be limited. This inability could have a material and adverse impact on our business, operating results, and financial condition. In addition, we must maintain ~~and periodically increase~~ the size of our sales force ~~in order~~ to ~~increase~~ **support** our direct sales and ~~support our~~ indirect sales channels. Because our products are very technical, salespeople require a comparatively long period of time to become productive, typically three to twelve months. This lag in productivity, as well as the challenge of attracting qualified candidates, may make it difficult to ~~meet~~ **maintain** our sales force ~~growth targets. Further, we may not generate sufficient sales to offset the increased expense resulting from growing our sales force~~ . If we are unable to maintain ~~and periodically expand~~ our sales capability, our business, operating results and financial condition could be materially and adversely impacted. Loss of key personnel could adversely impact our business. Our future success depends to a significant degree on the skills, experience and efforts of Anil Singhal, our President, Chief Executive Officer, and co- founder, and our other key executive officers and senior managers to work effectively as a team. Effective succession planning is also important for our long- term success. Failure to ensure effective transfers of knowledge and smooth transitions involving key employees could hinder our strategic planning and execution. The loss of one or more of our key personnel could have a material and adverse impact on our business, operating results, and financial condition. We must, therefore, plan for and manage the succession of key executives due to retirement, illness, or competitive offers. Our **business is subject** ~~disclosures, initiatives and goals related~~ to ~~environmental~~ **evolving ESG laws** , **regulations** ~~social,~~ and ~~governance matters~~ **expectations that could** expose us to numerous risks, including risks to our reputation, business, financial performance and growth. **We** ~~As we identify environmental, social,~~ and ~~governance (~~ **our suppliers are subject to, and may become subject to, evolving laws and regulations pertaining to** ESG ~~) topics for voluntary~~ **matters. In addition, regulators, customers, investors, employees and other stakeholders are increasingly focused on ESG matters and related** ~~disclosure~~ **disclosures . These changing rules** , ~~we~~ **regulations and stakeholder expectations** have **resulted** ~~expanded, and,~~ in ~~the future~~ , ~~may~~ **and are likely to** continue to ~~expand~~ **result in, increased general and administrative expenses and increased management time and attention spent complying with** ~~our~~ - **or meeting such regulations and expectations. We also communicate certain ESG initiatives and goals in our public** disclosures ~~in these areas~~ . Statements about our ESG initiatives and goals, and progress against those goals, may be based on standards for measuring progress that are still developing, internal controls and processes that continue to evolve, and assumptions that are subject to change in the future. If our ESG- related data, processes and reporting are incomplete or inaccurate, or if we fail to achieve progress with respect to our ESG goals on a timely basis, or at all, our reputation, business, financial performance and growth could be adversely affected. We may not successfully complete acquisitions or integrate acquisitions we do make, which could impair our ability to compete and could harm our operating results. We may choose to acquire complementary businesses, products, or technologies to remain competitive or expand our business. We investigate and evaluate potential acquisitions of complementary businesses, products, and technologies in the ordinary course of business. We may compete for acquisition opportunities with entities having significantly greater resources than we have. As a result, we may not succeed in acquiring some or all businesses, products, or technologies that we seek to acquire. Our inability to effectively consummate acquisitions on favorable terms could significantly impact our ability to compete effectively in our targeted markets and could negatively affect our results of operations. Acquisitions that we do complete could adversely impact our business. The potential adverse consequences from acquisitions include: • the potentially dilutive issuance of common stock or other equity instruments; • the incurrence of debt and amortization expenses related to acquired intangible assets; • the potential litigation or other **liabilities or** claims **or regulatory actions** in connection with an acquisition; • the incurrence of significant costs and expenses to complete the acquisition and integrate the acquired business; and • the potentially negative impact of poor performance of an acquisition on our earnings per share. Acquisition transactions also involve numerous business risks. These risks from acquisitions include: • difficulties in assimilating the acquired operations, technologies, personnel and products; • difficulties in assimilating diverse financial reporting and management information systems as well as differing ordering processes and customer relationship management systems; • use of cash to pay for acquisitions that may limit other potential uses of our cash, including stock repurchases and repayment of outstanding indebtedness; • substantial accounting charges for restructuring and related expenses, write- off of in- process research and development, impairment of goodwill, amortization or impairment of intangible assets and share- based compensation expense; • the potential loss of key employees, customers, distributors or suppliers; and • the inability to generate sufficient revenue to offset acquisition or investment costs. If we are not able to successfully manage these issues, the anticipated benefits and efficiencies of the acquisitions may not be realized fully or at all, or may take longer to realize than expected, and our ability to compete, our revenue and gross margins and our results of operations may be adversely affected. We face significant competition from other technology companies. The service assurance, application performance management, network security, cybersecurity and business intelligence markets are highly competitive, rapidly evolving, and fragmented markets that have overlapping technologies and competitors, both large and small, and we expect competition on solutions offerings and pricing to increase. We believe customers make service management system, network security, cybersecurity and business intelligence purchasing decisions based primarily upon the following factors: • product and service performance, functionality and price; • timeliness of new product and service introductions; • network capacity; • ease of installation, integration, and use; • customer service and technical support; • name and reputation of vendor; • quality and value of the product and services; and • alliances with industry partners. We compete with a large and growing number of providers of service assurance, application performance management solutions, network security offerings and network traffic analyzers and probes, as well as with providers of business intelligence services. In addition, leading network equipment, network security and service assurance and application technology vendors offer their own management solutions, including products which they license from other competitors. Some of our current and potential competitors have greater name recognition and substantially greater financial, management, marketing, service, support, technical, distribution and other resources than we do. In addition, some of our customers develop their own in- house solutions to meet their technological needs. Further, in recent years some of our competitors have been acquired by larger companies that are seeking to enter or expand in the markets in which we operate. We expect this trend to continue as companies attempt to strengthen or maintain their market positions in an evolving industry. Therefore, given their larger size and greater resources, our competitors may be able to respond more effectively than we can to new or changing opportunities, technologies, standards and customer requirements. As a result of the competitive factors highlighted in this section and in other risk factors, including the introduction of disruptive technologies, we may not be able to compete effectively with our current or future competitors. If we are unable to anticipate or react to these competitive challenges or if existing or new competitors gain market share in any of our markets, our competitive position could weaken and we could experience a decline in our sales that could adversely affect our business and operating results. This competition could result in increased pricing pressure, reduced profit margins, increased sales and marketing expenses, and failure to increase, or the loss of market share, any of which would likely have a material and adverse impact on our business, operating results and financial condition. Uncertainties of regulation of the Internet and data traveling over the Internet **or over the use of AI and evolving technologies** could have a material and adverse impact on our financial condition and results of operations. We could be materially adversely affected by increased regulation of the Internet and Internet commerce in any country where we operate, as well as access to or commerce conducted on the Internet. Further, governments may change or increase regulation or restriction of sales, licensing, distribution, and exporting or importing of certain technologies to certain countries. The adoption of additional regulation of the Internet and Internet commerce could decrease demand for our products, and, at the same time, increase the cost of selling our products, which could have a material and adverse effect on our financial condition and results of operations. **Failure to comply with governmental laws and regulations related to evolving technologies, such as Artificial Intelligence, could harm our business. Our business is subject to regulation by various federal, state, local and foreign governments. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. These laws and regulations may also impact our innovation and business drivers in developing or using new and emerging technologies, including those related to AI and machine learning. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, enforcement actions, lost profits, fines, damages, civil and criminal penalties, injunctions or other consequences. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management' s attention and resources. Enforcement actions and sanctions could have a material and adverse impact on our business, reputation, operating results and financial condition.** We are subject to stringent and evolving U. S. state, local, and foreign laws, regulations ~~,~~ **and** rules, contractual obligations, policies, and other obligations related to data privacy and security. Our actual, or perceived failure to comply with such obligations **(or such failure by the third parties with whom we work)** could lead to regulatory investigations or actions; litigation; fines and penalties; disruptions of our business, results of operations; reputational harm; loss of revenue or profits; and other adverse business consequences. Our data processing activities ~~may~~ subject us to numerous data privacy and security obligations, such as various laws, regulations, external and internal privacy and security policies, contractual requirements, and other obligations relating to data privacy and security. The regulatory framework for data privacy and security issues worldwide ~~is rapidly evolving~~ **has and will continue to evolve** , and as a result, legal requirements and enforcement practices are likely to continue to ~~evolve~~ **impact business requirements regarding the collection, use, storage, protection, retention, or transfer of data** . In many jurisdictions, enforcement activities and consequences for noncompliance are rising. In the United States, federal, state, and local governments have enacted **and are continuing to enact** numerous data privacy and security laws, including data breach notification laws, personal information privacy laws, consumer protection laws, and other similar laws ~~that in some instances are not consistent with laws of other jurisdictions. Additionally, laws in all states and U. S. territories require businesses to notify affected individuals, governmental entities, and / or credit reporting agencies of certain security breaches affecting personal information. Compliance with these laws in the event of a widespread data breach is complex and costly and additional compliance measures will require investment and potential changes to our business process~~ . Furthermore, under various privacy laws and other obligations, we may be required to obtain certain consents to process personal ~~data~~ **information** . Our inability or failure to do so could result in adverse consequences. Outside the United States, **a** ~~an increasing~~ number of laws ~~,~~ **and** regulations **also** ~~, and industry standards may~~ govern data privacy and security. These ~~obligations related to data privacy~~ and **other** ~~security are quickly changing, becoming increasingly stringent, and creating regulatory uncertainty. Additionally, these~~ obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions **. For example, the EU GDPR and the United Kingdom' s GDPR (" UK GDPR") impose strict requirements for processing personal information** . Preparing for and complying with these obligations requires us to devote ~~significant~~ **considerable** resources and may necessitate changes to our services, information technologies, systems, and practices and to those of any third parties that process personal information on our behalf. In addition, we may be unable to transfer personal information from Europe and other jurisdictions to the United States or other countries due to data localization requirements or limitations on cross- border data ~~flows. Europe and other jurisdictions have enacted laws requiring data to be localized or limiting the transfer~~ **transfers** ~~of personal information to other countries~~ . In particular, the European Economic Area (**"** EEA **"**) and the United Kingdom (**"** UK **"**) have significantly restricted the transfer of personal information to the United States and other countries ~~whose~~ **. Other jurisdictions may adopt similarly stringent interpretations of their** data ~~privacy~~ **localization** and ~~security~~ **cross- border data transfer** laws ~~it believes are inadequate~~ . Although there are currently various **legal** mechanisms **available** ~~that may be used~~ to transfer personal information from **Europe to** ~~the~~ **other countries, including** ~~EEA and UK to~~ the United States ~~in compliance with law~~ , such as the EEA **'** ~~and UK'~~ s standard contractual clauses **, the UK' s International Data Transfer Agreement / Addendum and the EU- U. S. Data Privacy Framework and the UK extension thereto (which allows for transfers to relevant U. S.- based organizations who self- certify compliance and participate in the Framework)** , these mechanisms are subject to legal challenges, and there is no assurance that we can satisfy or rely on these measures to lawfully transfer personal information to the United States. If there is no lawful manner for us to transfer personal information from **Europe** ~~the EEA, the UK,~~ or other jurisdictions to the United States, or if the requirements for a legally- compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our data processing activities to other jurisdictions at significant expense, increased exposure to regulatory actions, fines and penalties, the inability to transfer data and work with ~~partners~~ **resellers** , vendors and other third parties, and injunctions against our processing or transferring of personal information necessary to operate our business. Additionally, companies that transfer personal information out of the EEA and UK to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators ~~, individual litigants,~~ and ~~industry groups~~ **other interested parties** . In addition to data privacy and security laws, we are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. We publish ~~privacy~~ policies, marketing materials ~~,~~ and other statements ~~, such as compliance with certain certifications or self- regulatory principles,~~ regarding **our** data privacy and security **compliance activities** . If these policies, materials or statements are found to be **inaccurate** ~~deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our~~ **or incomplete** ~~practices,~~ we may be subject to investigation, enforcement actions by regulators, or other adverse consequences. ~~If we~~ **We may at times fail, or be perceived to have failed, in** ~~or~~ **our** ~~the~~ **efforts to comply with our data privacy and security obligations. Moreover, despite our efforts, our personnel or** third parties ~~on~~ **with whom we work may fail to comply with such obligations,** which **could negatively impact our business operations. If** we ~~rely~~ **or the third parties with whom we work** fail, or are perceived to have failed, to address or comply with applicable data privacy and security obligations, we could face significant consequences, including but not limited to: government enforcement actions; litigation; additional reporting requirements and / or oversight; bans on processing personal information; and orders to destroy or not use personal information. Any of these events could have a material adverse effect on our reputation, business, or financial condition, including but not limited to, loss of customers, inability to process personal information or to operate in certain jurisdictions, limited ability to develop or commercialize our products, expenditure of time and resources to defend any claim or inquiry, adverse publicity, or substantial changes to our business model or operations. If we violate the U. S. Foreign Corrupt Practices Act or applicable anti- bribery laws in other countries, or if we fail to comply with U. S. export controls and government contracting laws, our business could be harmed. A material portion of our revenue is derived from international sales. We must comply with foreign and U. S. laws and regulations, such as the U. S. Foreign Corrupt Practices Act, the U. K. Bribery Act, and other local laws prohibiting corrupt payments to government officials and others, as well as anti- competition regulations. The U. S. Foreign Corrupt Practices Act (FCPA) ~~, generally~~ prohibits U. S. companies and their intermediaries from making corrupt payments to foreign officials for the purpose of obtaining or keeping business or otherwise obtaining favorable treatment and requires companies to maintain appropriate record- keeping and internal accounting practices to accurately reflect the transactions of the company. Under the FCPA, U. S. companies may be held liable for actions taken by agents or local partners or representatives. In addition, regulators may seek to hold us liable for successor liability FCPA violations committed by companies which we acquire. We are also subject to the U. K. Bribery Act and may be subject to anti- corruption laws of other countries in which we do business. In addition to anti- bribery and anti- corruption laws, we are also subject to the export and re- export control laws of the U. S., including the U. S. Export Administration Regulations (EAR) and the office of Foreign Asset Control (OFAC), as well as to U. S. **and state and local** government contracting laws, **complex procurement** rules and regulations, and may be subject to government contracting laws of other countries in which we do business. If we or our distributors, resellers, agents, or other intermediaries fail to comply with the FCPA, the EAR, OFAC or U. S. **or state and local** government contracting laws, or the anti- corruption, export or governmental contracting laws of other countries, governmental authorities in the U. S. or other countries could seek to impose civil and / or criminal penalties, which could have a material adverse effect on our business, results of operations, financial conditions and cash flows. Violations of these laws and regulations could result in fines and penalties, criminal sanctions, restrictions on our business conduct **including suspension or debarment from future government business,** and on our ability to offer our products and services in one or more countries. Such violations could also adversely affect our reputation with existing and prospective customers, which could negatively impact our operating results and growth prospects. General Risk Factors Our actual operating results may differ significantly from our guidance. We generally release guidance regarding our future performance on our quarterly earnings conference calls, quarterly earnings releases, and otherwise. Such guidance, which includes forward- looking statements, reflects our management' s estimates as of the date of release and is based on projections prepared by our management. We may also decide not to release, or to defer, issuing guidance, where such guidance might not be appropriate or when we do not have sufficient visibility or clarity to issue such guidance. In those situations, we expect to communicate our reasons for not releasing or deferring release of guidance. Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook with analysts and investors. We are not responsible for any projections or reports published by any such analysts or investors. Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions underlying the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material. In light of the foregoing, investors are urged not to rely solely upon our guidance in making an investment decision regarding our common stock. Any failure to successfully implement or execute our operating strategy or the occurrence of any of the events or circumstances set forth in this" Risk Factors" section in this report could result in the actual operating results being different from our guidance, and the differences may be adverse and material. Our effective tax rate may fluctuate, which could increase our income tax expense and reduce our net income. Our effective tax rate or the taxes we owe could be adversely affected by several factors, many of which are outside of our control, including: • changes in the relative proportions of revenues and income before taxes in the various jurisdictions in which we operate that have differing statutory tax rates; • changing tax laws, regulations, and interpretations in multiple jurisdictions in which we operate as well as the requirements of certain tax rulings; • changes in the research and development tax credit laws; • earnings being lower than anticipated in jurisdictions where we have lower statutory rates and being higher than anticipated in jurisdictions where we have higher statutory rates; • the valuation of generated and acquired deferred tax assets and the related valuation allowance on these assets; • transfer pricing adjustments; • the tax effects of purchase accounting for acquisitions and restructuring charges that may cause fluctuations between reporting periods; and • tax assessments or any related tax interest or penalties that could significantly affect our income tax expense for the period in which the settlements take place. We are subject to income taxes in the United States and in numerous foreign jurisdictions. From time to time, we may receive notices that a tax authority in a particular jurisdiction believes that we owe a greater amount of tax than we have reported to such authority. While we regularly assess the likelihood of adverse outcomes from such examinations and the adequacy of our provision for income taxes, there can be no assurance that such provision is sufficient and that a determination by a tax authority will not have an adverse effect on our results of operations. An adverse change in our effective tax rate could have a material and adverse effect on our financial condition and results of operations and the price of our common stock could decline if our financial results are materially affected by an adverse change in our effective tax rate. We may be impacted by changes in taxation, trade, **tariffs,** and other regulatory requirements. We are subject to income tax in local, national, and international jurisdictions. In addition, our products are subject to import and excise duties and / or sales or value- added taxes (VAT) in many jurisdictions. We are also subject to the examination of our tax returns and other tax matters by the Internal Revenue Service and other tax authorities and governmental bodies. We regularly assess the likelihood of an adverse outcome resulting from these examinations to determine the adequacy of our provision for taxes. Additionally, changes in or the improper application of import and excise duties and or sales taxes or VAT may negatively impact our operating results. There can be no assurance as to the outcome of these examinations. Fluctuations in tax rates and duties, changes in tax legislation or regulation or adverse outcomes of these examinations could have a material adverse effect on our results of operations, financial condition, and cash flows. There is increased uncertainty with respect to tax policy and trade relations between the U. S. and other countries. Major developments in tax policy or trade relations, such as the imposition of unilateral tariffs or international sanctions on imported products, could have a material adverse effect on our results of operations, financial condition, and cash flows. Foreign currency exchange rates may adversely affect our financial statements. A material portion of our revenue is derived from international operations. Our consolidated financial results are reported in U. S. dollars. Most of the revenue and expenses of our foreign subsidiaries are denominated in local currencies. Given that cash is typically received over an extended period of time for many of our license and support agreements and given that a material portion of our revenue is generated outside of the United States, fluctuations in foreign exchange rates (including the Euro) against the U. S. dollar could result in substantial changes in reported revenues and operating results due to the foreign exchange impact upon translation of these transactions into U. S. dollars. In the normal course of business, we employ various hedging strategies to partially mitigate these risks, including the use of derivative instruments. These strategies may not be effective in fully protecting us against the effects of fluctuations from movements in foreign exchange rates, including the increased volatility in foreign exchange rates relating to the COVID- 19 pandemic, the ~~war~~ **wars** in Ukraine **and Middle East,** and future global pandemics and other events. Fluctuations of the foreign exchange rates could materially adversely affect our business, financial condition, operating results, and cash flow. Additionally, sales and purchases in currencies other than the U. S. dollar expose us to fluctuations in foreign currencies relative to the U. S. dollar and may adversely affect our financial statements. Increased strength of the U. S. dollar increases the effective price of our products sold in U. S. dollars into other countries, which may require us to lower our prices or adversely affect sales. Decreased strength of the U. S. dollar could adversely affect the cost of materials, products, and services we purchase overseas. Sales and expenses of our non- U. S. businesses are also translated into U. S. dollars for reporting purposes and the strengthening or weakening of the U. S. dollar could result in unfavorable translation effects. In addition, we may invoice customers in a currency other than the functional currency of our business, and movements in the invoiced currency relative to the functional currency could also result in unfavorable translation effects. We also face exchange rate risk from our investments in subsidiaries owned and operated in foreign countries. Our estimates and judgments related to critical accounting policies could be inaccurate. We consider accounting policies related to revenue recognition, and valuation of goodwill, intangible assets and other acquisition accounting items to be critical in fully understanding and evaluating our financial results. Management makes judgments and creates estimates when applying these policies. These estimates and judgments affect, among other things, the reported amounts of our assets, liabilities, revenue and expenses, the amounts of charges accrued by us, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances and at the time they are made. If our estimates or the assumptions underlying them are not correct, actual results may differ materially from our estimates and we may need to, among other things, accrue additional charges or impair assets that could adversely impact our business. As a result, our operating results and financial condition could be materially and adversely impacted in future periods. Our disclosure controls and procedures and internal control over financial reporting may not be effective. Our disclosure controls and procedures and internal control over financial reporting may not prevent all material errors and intentional misrepresentations. Any system of internal control can only provide reasonable assurance that all control objectives are met. Some of the potential risks involved could include, but are not limited to, management judgments, simple errors or mistakes, misinterpretation, and willful misconduct regarding controls. Under Section 404 of the Sarbanes- Oxley Act, we are required to evaluate and determine the effectiveness of our internal control over financial reporting. Compliance with this provision requires management' s attention and expense. Management' s assessment of our internal control over financial reporting may or may not identify weaknesses that need to be addressed in our internal control system. If we are unable to conclude that our internal control over financial reporting is effective, investors could lose confidence in our reported financial information which could have an adverse effect on the market price of our stock or impact our borrowing ability. In addition, changes in operating conditions and changes in compliance with policies and procedures currently in place may result in inadequate disclosure controls and procedures and internal control over financial reporting in the future. Our stock price has been subject to fluctuations, and will likely continue to be subject to fluctuations, which may be volatile and due to factors beyond our control. The market price of our common stock is subject to wide fluctuations in response to various factors, some of which are beyond our control. In addition to the factors discussed in this" Risk Factors" section and elsewhere in this report, factors that could cause fluctuations in the market price of our common stock include the following: • ratings changes by any securities analysts who follow our company; • announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures, or capital commitments; • changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular; • changes in accounting standards, policies, guidelines, interpretations, or principles; • actual or anticipated developments in our business or our competitors’ businesses or the competitive landscape generally; • developments or disputes concerning our intellectual property or our products and platform capabilities, or third- party proprietary rights; • cybersecurity attacks or incidents; • announced or completed acquisitions of businesses or technologies by us or our competitors; • changes in our board of directors or management; • announced or completed equity or debt transactions involving our securities; • sales of shares of our common stock by us, our officers, directors, or other stockholders; and • other events or factors, including those resulting from global and macroeconomic conditions, including heightened inflation, rising interest rates, bank failures, and a potential recession, and speculation regarding the same, as well as public health crises, the war in Ukraine or other wars and related geopolitical tension, incidents of terrorism, or responses to these events. In addition, the market for technology stocks and the stock markets in general have experienced extreme price and volume fluctuations. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business, and adversely affect our business, results of operations, financial condition, and cash flows. A decline in the value of our common stock, including as a result of one or more factors set forth above, may result in substantial losses for our stockholders. 30