Risk Factors Comparison 2024-02-15 to 2023-02-16 Form: 10-K

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Our operations and financial results are subject to various risks and uncertainties including those described below and other information contained in this Annual Report on Form 10- K. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties we are unaware of, or we currently believe are not material, may also become important factors that adversely affect our business. If any of the following risks or others not specified below materialize, our business, financial condition, and results of operations could be materially and adversely affected, and the trading price of our Class A common stock could decline. Risks Related to Our Business and Industry Our recent growth may not be indicative of our future growth and, if we continue to grow, we may not be able to manage our growth effectively. We have ~~experienced rapid~~ **focused on scaling our operations and growing our headcount in line with our** growth **plan** ~~in our headcount~~ and ~~operations. We~~ **size of our customer base, which we** have ~~also~~ significantly increased ~~the size of our customer base~~ over the last several years. While we have expanded our operations and headcount in prior periods, it is not indicative of our future growth and we may modify our pace of hiring to align with our growth plans. Our growth has placed, and any future growth will place, a significant strain on our management, administrative, operational, and financial infrastructure. Our success will depend in part on our ability to manage this growth effectively and we will need to continue to improve our operational, financial, and management controls and our reporting systems and procedures. Failure to effectively manage our growth could result in difficulty or delays in deploying our platform to customers, declines in quality or customer satisfaction, increases in costs, difficulties in introducing new features, or other operational difficulties. Any of these difficulties could adversely impact our business performance and results of operations. If we are unable to sustain our revenue growth rate, we may not achieve or maintain profitability in the future. We have experienced revenue growth with revenue of $ **545. 4 million, $** 468. 0 million, **and** $ 369. 3 million ~~, and $ 304. 6 million~~ in **2023,** 2022, **and** 2021 ~~, and 2020~~ , respectively. Although we have experienced rapid revenue growth historically, we may not continue to grow as rapidly in the future, and our revenue growth rates may decline. Any success we may experience in the future will depend in large part on our ability to, among other things: • Maintain and expand our customer base; • Increase revenue from existing customers through increased or broader use of our platform within their organizations; • **Compete in an AI- accelerated environment; •** Further penetrate the existing industry verticals we serve and expand into other industry verticals; and • Continue to successfully expand our business domestically and internationally. If we are unable to maintain consistent revenue or revenue growth, our stock price could be volatile, and it may be difficult to achieve and maintain profitability. Our revenue for any prior quarterly or annual periods should not be relied upon as any indication of our future revenue or revenue growth. We may not be able to scale our business quickly enough to meet our customers' growing needs, and if we are not able to grow efficiently, our operating results could be harmed. ~~As usage of our platform grows and as customers~~ **Customers may** use our platform for more advanced and ~~more~~ frequent projects **, resulting in usage growth for our platform. With such growth** , we may need to devote additional resources to improving our software architecture, integrating with third- party systems, and maintaining infrastructure performance. In addition, we will need **to continue** to appropriately scale our internal business operations as well as grow our partner services systems, including our Customer Success organization and operations, to serve our growing customer base, particularly as our customer base expands over time. Any failure of or delay in these efforts could cause impaired system performance and reduced customer satisfaction. These issues could reduce the attractiveness of our platform to customers, resulting in decreased sales to new customers, lower renewal rates by existing customers, the issuance of service credits, or requested refunds, any of which could hurt our revenue growth and our reputation. Even if we are able to upgrade our systems and expand our staff, any such expansion will be expensive and complex, requiring management time and attention. We could also face inefficiencies or operational failures as a result of our efforts to scale our infrastructure. Moreover, there are inherent risks associated with upgrading, improving, and expanding our information technology systems. We cannot be sure the expansion and improvements to our infrastructure and systems will be fully or effectively implemented on a timely basis, if at all. These efforts may reduce revenue and our margins and adversely impact our financial results. We are dependent on a single product, and the lack of continued market acceptance of our platform could cause our operating results to suffer. Sales of our software platform account for substantially all of our subscriptions revenue and are the source of substantially all of our professional services revenue. We expect we will be substantially dependent on our platform to generate revenue for the foreseeable future. As a result, our operating results or revenue growth rates could suffer due to: • Any decline or lower than expected growth in demand for our platform; • The failure of our platform to achieve continued market acceptance; • The market for low- code solutions not continuing to grow or growing more slowly than we expect; • The introduction of products and technologies **(including AI technologies)** that serve as a replacement or substitute for, or represent an improvement over, our platform; • Technological innovations or new standards that our platform does not address; • Sensitivity to current or future prices offered by us or competing solutions; • The inability to further penetrate our existing industry verticals or expand our customer base; and • Our inability to release enhanced versions of our platform on a timely basis. Our sales cycle is long and unpredictable, particularly with respect to large customers, and our sales efforts require considerable time and expense, all of which may cause our operating results to fluctuate. Our operating results may fluctuate, in part, because of the resource- intensive nature of our sales efforts, the length and variability of the sales cycle of our platform, and the difficulty we face in adjusting our short- term operating expenses **to respond to the fluctuations in the sales cycles** . Our operating results depend in part on sales to large customers and promotion of increasing usage by those large customers. The length of our sales cycle, from initial evaluation to delivery of and payment for our software, varies substantially from customer to customer, and it is difficult to predict if or when we will make a sale to a potential customer. We may spend substantial time, effort, and money on our sales and marketing efforts without any assurance our efforts will result in revenue. As a result of these factors, we may face greater costs, longer sales cycles, and less predictability in the future. In the past, certain individual sales have occurred in periods later than we expected or have not occurred at all. The loss or delay of one or more large transactions in a quarter could impact our operating results for that quarter and any future quarters in which such revenue otherwise would have been recognized because a substantial portion of our expenses are relatively fixed in the short-term. As a result of these factors, it is difficult for us to forecast our revenue accurately in any quarter, and our quarterly results may fluctuate substantially. Market adoption of low- code platforms to drive digital transformation is new and unproven and may not grow as we expect, which may harm our business and prospects. We believe our future success will depend in large part on growth in the demand for low- code platforms to drive software- enabled digital transformation. It is difficult to predict customer demand for our platform, renewal rates, the rate at which existing customers expand their subscriptions, the size and growth rate of the market for our platform, the entry of competitive products, or the success of existing competitive products. The utilization of low- code software to drive digital transformation is still relatively new. Any expansion in our addressable market depends on a number of factors, including businesses continuing to desire to differentiate themselves through software-enabled digital transformation, increasing their reliance on low- code solutions, changes in the competitive landscape, technological changes, **including due to advancements in AI,** budgetary constraints of our customers, and changes in economic conditions. If our platform does not achieve widespread adoption or there is a reduction in demand for low- code solutions caused by these factors, it could result in reduced customer purchases, reduced renewal rates, and decreased revenue, any of which will adversely affect our business, operating results, and financial condition. We currently face significant competition. The markets for low- code platforms, business process management, case management software, and custom software are highly competitive, rapidly evolving, and have relatively low barriers to entry. The principal competitive factors in our market include the following: platform features, reliability, performance, and effectiveness; ease of use and speed **; data fabric; utilization of AI** ; platform extensibility and ability to integrate with other technology infrastructures; deployment flexibility; robustness of professional services and customer support; price and total cost of ownership; strength of platform security and adherence to industry standards and certifications; strength of sales and marketing efforts; and brand awareness and reputation. If we fail to compete effectively with respect to any of these competitive factors, we may fail to attract new customers or lose or fail to renew existing customers, which would cause our operating results to suffer. Our main competitors fall into three categories: (1) providers of custom software and customer software solutions that address, or are developed to address, some of the use cases that can be addressed by applications developed on our platform; (2) providers of low- code development platforms ~~such as Microsoft, Salesforce. com, ServiceNow, OutSystems, and Mendix~~ ; and (3) providers of one or more automation technologies, including BPM, case management, process mining, and RPA ~~. Such providers include Pegasystems, Celonis, UiPath, Microsoft, SAP, and Oracle~~ . Some of our actual and potential competitors have advantages over us such as longer operating histories, more established relationships with current or potential customers and commercial partners, significantly greater financial, technical, marketing, or other resources, stronger brand recognition, larger intellectual property portfolios, and broader global distribution and presence. Such competitors may make their solutions available at a low cost or no cost basis in order to enhance their overall relationships with current or potential customers. Our competitors may also be able to respond more quickly and effectively than we can to new or changing opportunities, technologies, standards, or customer requirements **, including with respect to AI** . With the introduction of **AI** ~~new technologies~~ and new market entrants, we expect competition to intensify in the future. In addition, some of our larger competitors have substantially broader offerings and can bundle competing products with other software offerings. As a result, customers may choose a bundled offering from our competitors, even if individual products have more limited functionality than our platform. These larger competitors are also often in a better position to withstand any significant reduction in capital spending and will therefore not be as susceptible to economic downturns. If our security measures are actually or perceived to have been breached **,** or **if** unauthorized access to our platform or customer data **occurs** ~~is otherwise obtained~~ , our platform may be perceived as not being secure, **and** customers may reduce the use of or stop using our platform, and we may incur significant liabilities. Our platform, which can be deployed in the cloud or on- premises, allows for the storage and transmission of our customers' proprietary or confidential information, which may include trade secrets, personally identifiable information, personal health information, and payment card information. Any actual or perceived unauthorized access to, or security incidents affecting, our platform or the information stored on or transmitted by our platform, including through unauthorized and / or malicious activity by one of our employees, could result in the loss of information, litigation, regulatory investigations, penalties, indemnity obligations and other costs, expenses, and liabilities, which could exceed our existing insurance coverage and could result in a substantial financial loss. While we have security measures in place designed to protect customer information and prevent data loss and other security breaches, there can be no assurance these measures will be effective in protecting against malicious unauthorized access to our platform or our customers' information. Similarly, if cyber incidents such as phishing attacks, viruses, denial of service attacks, supply chain attacks, malware installation, ransomware attacks, server malfunction, software or hardware failures, loss of data or other computer assets, adware, or other similar issues impair the integrity or availability of our systems by affecting our data or reducing access to or shutting down one or more of our computing systems or our IT network, we may be subject to negative treatment by our customers, our business partners, the press, and the public at large. Further, ~~while~~ **even though we have** security **measures in place that are** tested and **verified** ~~techniques are in place and tested~~ by third parties, because the techniques used to obtain unauthorized access or sabotage systems change frequently and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or to implement adequate preventative measures. Additionally, we may be subject to attacks on our networks or systems or attempts to gain unauthorized access to our proprietary or confidential information or other data we or our vendors maintain such as data about our employees. Such attacks and other breaches of security may occur as a result of malicious attacks, human error, social engineering, or other causes. Any **of the foregoing risks may be heightened by our use of AI, and the use of AI may enhance the effectiveness of any of the foregoing threat actors or their attempts to gain unauthorized access to our platform or our or our customers' confidential, proprietary, or personal information. Any** actual or perceived breach of our security measures or failure to adequately protect our customers' or our confidential ~~or~~ **,** proprietary **, or personal** information could negatively affect our ability to attract new customers, cause existing customers to elect to not renew their subscriptions to our software, or result in reputational damage, any of which could adversely affect our operating results. Further, security compromises experienced by our customers with respect to data hosted on our platform, even if caused by the customer' s own misuse or negligence, may lead to public disclosures, which could harm our reputation, erode customer confidence in the effectiveness of our security measures, negatively impact our ability to attract new customers, or cause existing customers to elect not to renew their subscriptions with us. We may be subjected to indemnity demands, regulatory proceedings, audits, penalties, or litigation based on our customers' misuse of our platform with respect to such sensitive information and defending against such litigation and otherwise addressing such matters may be expensive, cause distraction, and may result in us incurring liability, all of which may affect our operating results. While we maintain general liability insurance coverage and coverage for errors or omissions, we cannot provide assurance such coverage will be adequate or otherwise protect us from liabilities or damages with respect to claims alleging compromises of personal data or that such coverage will continue to be available on acceptable terms or at all. We derive a material portion of our revenue from a limited number of customers, and the loss of one or more of these customers could **materially and** adversely impact our business, results of operations, and financial condition. Our customer base is concentrated. For example, during the years ended December 31, **2023,** 2022, **and** 2021 ~~, and 2020~~ , revenue from U. S. federal government agencies represented **21. 3 %,** 19. 2 %, **and** 19. 6 ~~%, and 18. 1~~ % of our total revenue, respectively, and the top three U. S. federal government customers generated 4. **2 %, 4.** 5 %, **and** 5 ~~. 6 %, and 6~~ . 6 % of our total revenue for the years ended December 31, **2023,** 2022, **and** 2021, ~~and 2020,~~ respectively. Further, nearly ~~11~~ **12** % of our subscription customers spent more than $ 1 million on our software in ~~2022~~ **2023** . If we were to lose one or more of our significant customers, our revenue ~~may~~ **would** significantly decline. In addition, revenue from significant customers may vary from period to period depending on the timing of renewing existing agreements or entering into new agreements. The loss of one or more of our significant customers could **materially and** adversely affect our business, results of operations, and financial condition. A portion of our revenue is generated from subscriptions sold to governmental entities and heavily regulated organizations, which are subject to a number of challenges and risks. A significant portion of our revenue is generated from subscriptions sold to governmental entities, both in the United States and internationally. Additionally, many of our current and prospective customers such as those in the financial services, ~~insurance,~~ life sciences **, insurance** , and healthcare industries are highly regulated and may be required to comply with more stringent regulations in connection with subscribing to and implementing our platform. Selling subscriptions to these entities can be highly competitive, expensive, and time- consuming, often requiring significant upfront time and expense without any assurance we will successfully complete a sale. In addition, if our software does not meet the standards of new or existing regulations, we may be in breach of our contracts with our customers, allowing them to terminate their agreements. Governmental demand and payment for our platform may also be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our platform. **The United States has previously experienced lapses in federal appropriations, and any such future lapses could negatively affect our business, results of operations, and financial condition. In addition,** ~~Governmental~~ **governmental** and highly regulated entities impose compliance requirements that are complicated, make pricing readily available, subject continued business to unpredictable competitive processes, or are otherwise time- consuming and expensive to satisfy. In the United States, applicable federal contracting regulations change frequently, and the President may issue executive orders requiring federal contractors to adhere to new compliance requirements after a contract is signed. If we commit to ~~meet~~ **meeting** special standards or requirements and do not meet them, we could be subject to significant liability from our customers or regulators. Even if we do meet these special standards or requirements, the additional costs associated with providing our platform to government and highly regulated customers could harm our operating results. Moreover, changes in the underlying statutory and regulatory conditions that affect these types of customers could compromise our ability to efficiently provide them access to our platform and to grow or maintain our customer base. In addition, engaging in sales activities to foreign governments introduces additional compliance risks specific to the U. S. Foreign Corrupt Practices Act, the U. K. Bribery Act, and other similar statutory requirements prohibiting bribery and corruption in the jurisdictions in which we operate. We have experienced losses in the past, and we may not achieve or sustain profitability in the future. We generated net losses of $ **111. 4 million, $** 150. 9 million, **and** $ 88. 6 million ~~, and $ 33. 5 million~~ in **2023,** 2022, **and** 2021 ~~, and 2020~~ , respectively. As of December 31, ~~2022~~ **2023** , we had an accumulated deficit of $ ~~408~~ **519** . ~~5~~ **9** million. We will need to generate and sustain increased revenue levels in future periods in order to achieve or sustain profitability in the future. We also expect our costs to increase in future periods, which could negatively affect our future operating results if our revenue does not increase commensurately. For example, we intend to continue to expend significant funds to expand our sales and marketing operations, develop and enhance our platform ~~, meet the increased compliance requirements associated with our operation as a public company~~ , and expand into new markets. Our efforts to grow our business may be more costly than we expect, and we may not be able to increase our revenue enough to offset our higher operating expenses. We may incur significant losses in the future for a number of reasons, including the other risks described in this Annual Report on Form 10- K, and unforeseen expenses, difficulties, complications and delays, and other unknown events. If we are unable to achieve and sustain profitability, our stock price may significantly decrease **. AI is a disruptive set of technologies that may affect the markets for our software dramatically and in unpredictable ways. The emerging technologies described as AI, which include machine learning, application of large language models, generative AI, machine learning models, and similar means of algorithm self- generation and other AI tools have the ability to**

affect the market for our software by directing what are now human- orchestrated processes into machine- orchestrated processes. In recent years, AI technologies have been the subject of great interest to our customers and to followers of our markets, and these technologies have been showcased and subject to substantial interest among our customer base. To the extent that we incorporate or will in the future incorporate AI into our software platform, either directly or through integration with AI technologies, we could benefit greatly from the speed and accuracy presented by those technologies, and it could improve our market position relative to our competitors. On the other hand, should we either fail to adopt or integrate with AI technologies that show benefits to our customers, or should AI technologies for code generation or application development reduce the demand for our process automation platform, we could struggle to continue to grow our business or lose business with existing customers to such technologies, and this could negatively impact our business performance and results of operations. We have incorporated, and may continue to incorporate, AI in our products and services, and this incorporation of AI in our business and operations may become more significant over time. The use of generative AI, a relatively new and emerging technology in the early stages of commercial use, exposes us to additional risks, such as damage to our reputation, competitive position, and business, legal and regulatory risks and additional costs. For example, generative AI has been known to produce false or " hallucinatory " inferences or output, and certain generative AI uses machine learning and predictive analytics, which can create inaccurate, incomplete, or misleading content, unintended biases, and other discriminatory or unexpected results, errors or inadequacies, any of which may not be easily detectable by us or any of our related service providers. As a result, while generative AI may help provide more tailored or personalized experiences or output, if the content, analyses, or recommendations produced by any of our products or services that use or incorporate generative AI are, or are perceived to be, deficient, inaccurate, biased, unethical or otherwise flawed, our reputation, competitive position and business may be materially and adversely affected. In addition, new laws and regulations, or the interpretation of existing laws and regulations, in any of the jurisdictions we operate in may affect our ability to leverage AI in any of our products and services, and may expose us to government enforcement or civil suits. As the legal and regulatory framework encompassing AI matures, it may result in increases in our operational and development expenses that impact our ability to develop, earn revenue from or utilize any products or services incorporating AI. For more information on the legal and regulatory risks associated with the use of AI, please see our risk factor below at " — Regulatory and legislative developments related to the use of AI could adversely affect our use of such technologies in our products, services, and business. " Additionally, if any of our employees, contractors, vendors or service providers use any third- party software incorporating AI in connection with our business or the services they provide to us, it may lead to the inadvertent disclosure or incorporation of our confidential, sensitive or proprietary information into publicly available training sets which may impact our ability to realize the benefit of, or adequately maintain, protect and enforce our intellectual property or sensitive or confidential information, harming our competitive position and business. Our ability to mitigate risks associated with disclosure of our proprietary, sensitive or confidential information, including in connection with the use of AI, will depend on our implementation, maintenance, monitoring and enforcement of appropriate technical and administrative safeguards, policies and procedures governing the use of AI in our business. Additionally, any output created by us using generative AI may not be subject to copyright protection which may adversely affect our or our customers' intellectual property rights in, or ability to commercialize or use, any such content. In the U. S., a number of civil lawsuits have been initiated related to the foregoing and other concerns, any one of which may, amongst other things, require us to limit the ways in which our AI tools and technologies are trained, refined or implemented, and may affect our ability to develop products or services using or incorporating AI. While AI-related lawsuits to date have generally focused on certain foundational AI service providers and large language models, our use of any output produced by generative AI may expose us to claims, increasing our risks of liability. For example, the output produced by generative AI may include information subject to certain privacy or rights of publicity laws or constitute an unauthorized derivative work of the copyrighted material used in training the underlying AI model, any of which may create a risk of liability for us, or adversely affect our business or operations. In addition, the use of AI has resulted in, and may in the future result in, cybersecurity incidents that implicate the personal data of users of our AI tools or technologies. To the extent that we do not have sufficient rights to use any data or other material or content produced by generative AI in our business, or if we experience cybersecurity incidents in connection with our use of AI, it could adversely affect our reputation and expose us to legal liability or regulatory risk, including with respect to third-party intellectual property, privacy, publicity, contractual or other rights. Furthermore, our competitors, customers or other third parties may incorporate AI into their products more quickly or more successfully than us, which could impair our ability to compete effectively. If any third- party AI tools are trained using or otherwise leverage any of our proprietary data or data sets, our competitive advantage may be impaired, and our ability to commercialize our own AI tools or such data and data sets may be undermined, damaging our operations and business. The increasing use of generative AI by third parties may also negatively impact the integrity of our own proprietary data, data sets and content databases if and to the extent that any invalid, inaccurate, biased or otherwise flawed data produced by any such AI systems may inadvertently be incorporated in our proprietary data, data sets or content databases, negatively affecting our reputation, and the value of our proprietary data, data sets or content databases. AI also may impact our business in other ways, including with respect to hiring, employee turnover, our environmental footprint, and research and development costs. As generative AI and other AI tools are relatively new, sophisticated and evolving quickly, we cannot predict all of the risks that may arise from our current or future use of AI in our business. Any of the foregoing and any similar issues, whether actual or perceived, could negatively impact our customers' experience and diminish the perceived quality and value of our products and services. This in turn could damage our brand, reputation, competitive

position, and business. As the use of AI becomes more prevalent, including in the industries in which we operate, we anticipate that AI will continue to present new or unanticipated ethical, reputational, technical, operational, legal, competitive, and regulatory issues, among others. We expect that our incorporation of AI in our business will require additional resources, including the incurrence of additional costs, to develop and maintain our AI- related products and services, to minimize potentially harmful or unintended consequences, to comply with applicable and emerging laws and regulations, to maintain or extend our competitive position, and to address any ethical, reputational, technical, operational, legal, competitive or regulatory issues which may arise as a result of any of the foregoing. As a result, the challenges presented with our use of AI could adversely affect our business, financial condition and results of operations. We use AI, including machine learning and generative AI, throughout our business. As the regulatory framework for machine learning technology, generative AI and automated decision making evolves, our business, financial condition, and results of operations may be adversely affected. The regulatory framework for AI and similar technologies, and automated decision making, is changing rapidly. It is possible that new laws and regulations will be adopted in the United States and in non- U. S. jurisdictions, or that existing laws and regulations may be interpreted in ways that would affect the operation of our business, including our data analytics products and services and the way in which we use AI and similar technologies in our business. For example, the European Union' s proposed Artificial Intelligence Act, if enacted in its current form or any similar form, would have a material impact on the way AI is regulated in the EU, including significant fines for violations related to offering prohibited AI systems or data governance, high- risk AI systems and for supplying incorrect, incomplete, or misleading information to EU and member state authorities. We may not be able to adequately anticipate or respond to these evolving laws and regulations, and we may need to expend additional resources to adjust our products or services in certain jurisdictions if applicable legal frameworks are inconsistent across jurisdictions. In addition, because these technologies are themselves highly complex and rapidly developing, it is not possible to predict all of the legal or regulatory risks that may arise relating to our use of such technologies. Further, the cost to comply with such laws or regulations could be significant and would increase our operating expenses, which could adversely affect our business, financial condition and results of operations . Our future results of operations may fluctuate significantly due to a wide range of factors, which makes our future results difficult to predict. Our revenue and results of operations have historically varied from period to period, and we expect they will continue to do so as a result of a number of factors, many of which are outside of our control, including: • The level of demand for our platform and our professional services; • The rate of renewal of subscriptions with, and extent of sales of additional subscriptions to, existing customers; • Large customers failing to renew their subscriptions; • The size, timing, and terms of our subscription agreements with existing and new customers, including revenue recognition issues; • Variations in the revenue mix of our professional services and growth rates of our cloud subscription and professional services offerings, including the timing of subscriptions and sales offerings that include an on- premises software element for which the revenue allocated to that deliverable is recognized upfront; • The timing and growth of our business, in particular through our hiring of new employees and international expansion; • The timing of our adoption of new or revised accounting pronouncements applicable to public companies and the impact on our results of operations; • The introduction of new products and product enhancements by existing competitors or new entrants into our market and changes in pricing for solutions offered by us or our competitors; • Network outages, security breaches, technical difficulties, or interruptions with our platform; • Changes in the growth rate of the markets in which we compete; • The mix of subscriptions to our platform and professional services sold during a period; • Customers delaying purchasing decisions in anticipation of new developments or enhancements by us or our competitors or otherwise; • Changes in customers' budgets; • **Lapses of federal appropriations in the United States for our government customers; •** Seasonal variations related to sales and marketing and other activities such as expenses related to our customers; • Our ability to increase, retain, and incentivize the strategic partners that market and sell our platform; • Our ability to control costs, including our operating expenses; • Our ability to hire, train, and maintain our direct sales team; • Unforeseen litigation and intellectual property infringement ~~; • Any changes in accounting principles generally accepted in the United States, or GAAP~~ ; • Fluctuations in our effective tax rate; and • General economic and political conditions, both domestically and internationally, as well as economic conditions specifically affecting industries in which our customers operate. Any one of these or other factors discussed elsewhere in this Annual Report on Form 10- K or the cumulative effect of some of these factors may result in fluctuations in our revenue and operating results, meaning quarter- to- quarter comparisons of our revenue, results of operations, and cash flows may not necessarily be indicative of our future performance, may cause us to miss our guidance or analyst expectations, and may cause our stock price to decline. In addition, we have historically experienced seasonality in terms of when we enter into agreements with customers. We typically enter into a significantly higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in the fourth quarter. The increase in customer agreements for the fourth quarter is attributable to large enterprise account buying patterns typical in the software industry. Furthermore, we usually enter into a significant portion of agreements with customers during the last month, and often the last two weeks, of each quarter. This seasonality is reflected to a much lesser extent, and sometimes is not immediately apparent, in revenue due to the fact we recognize cloud ~~subscription~~ **subscriptions** revenue over the term of the subscription agreement, which is generally one to three years. We expect seasonality will continue to affect our operating results in the future and may reduce our ability to predict cash flow and optimize the timing of our operating expenses. We may fail to meet our publicly announced guidance or other expectations about our business and future operating results, which could cause our stock price to decline. We have provided and may continue to provide guidance about our business, future operating results, and other business metrics. In developing this guidance, our management must make certain assumptions and judgments about our future performance. Furthermore, analysts and investors may develop and publish their own projections of our business, which may form a consensus about our future performance. Our business results may vary significantly from such guidance or that consensus due to a number of factors, many of which are outside of our control, including due to the global economic uncertainty and financial market conditions which could adversely affect our operations and operating results. Furthermore, if our publicly announced guidance of future operating results fails to meet our previously announced guidance or the expectations of securities analysts, investors, or other interested parties, the price of our common stock would decline. ~~If we are unable to successfully transition to new leadership in key departments, our results could suffer. Appian has undergone change in departments directly responsible for substantially all of Appian' s revenue. While Appian believes its new leaders in these departments are highly qualified and will perform well in their roles, there can be no assurances the transition to new leadership will be executed without any disruption or effect on performance. New leadership requires time to become familiar with Appian' s product offerings and its customer base, and such transition could lead to delayed implementation of strategies, revision of key practices and policies, re- training of personnel, and other disruptions. While we will make efforts to mitigate such risk through extensive collaboration at the executive level, the effects of this transition could have an impact on our ability to sustain our growth in revenue or our ability to retain existing talent within the organization.~~ We rely on the performance of highly skilled personnel, including senior management and our engineering, professional services, sales, and technology professionals; if we are unable to retain or motivate key personnel or hire, retain, and motivate qualified personnel, our business would be harmed. We believe our success has depended, and continues to depend, on the efforts and talents of our senior management team, particularly Matt Calkins, our founder and Chief Executive Officer, and our highly skilled team members, including our sales personnel, professional services personnel, cloud engineering and support personnel, and software engineers. We do not maintain key ~~man~~ **person** insurance on any of our executive officers or key employees. From time to time, there have been and may continue to be changes in our senior management team resulting from the termination or departure of our executive officers and key employees. Our senior management and key employees are employed on an at- will basis, which means they could terminate their employment with us at any time. Many of our executive officers and key employees receive equity compensation as a significant portion of their overall compensation package. A substantial decrease in the market price of our Class A common stock would effectively reduce the compensation of such persons ~~and could increase the risk they depart from our company~~ . The loss of any of our senior management or key employees, particularly Mr. Calkins, could adversely affect our ability to build on the efforts they have undertaken and to execute our business plan, and we may not be able to find adequate replacements. We cannot ensure we will be able to retain the services of any members of our senior management or other key employees. Our ability to successfully pursue our growth strategy also depends on our ability to attract, motivate, and retain our personnel. Competition for ~~well~~ **highly** - qualified employees in all aspects of our business, including sales personnel, professional services personnel, cloud engineering and support personnel, and software engineers, is intense **. As a result of the COVID- 19 pandemic, many more employers allowed remote work, which resulted in the market for employee talent becoming more national and some employees preferring remote work. As we have chosen to return to office- based work over time to benefit from the better culture and productivity we believe in- office work affords, we may not be able to attract and retain employees who would choose to work remotely, while we also still face hiring competition from companies with remote- based workforces who can hire without respect to office location** . Our continued ability to compete effectively depends on our ability to attract new employees and to retain and motivate existing employees ~~. Further, a small portion of our employees are immigrants to the United States or foreign nationals holding visas. If immigration to the United States is further restricted by the federal government, we might lose existing employees who are unable to remain in the United States and our pool of qualified applicants might also be diminished, thereby hampering our recruiting efforts. If we do not succeed in attracting well- qualified employees or retaining and motivating existing employees, our business would be adversely affected~~ . If we do not continue to innovate and provide a platform that is useful to our customers, we may not remain competitive, and our revenue and operating results could suffer. Our success depends on continued innovation to provide features that make our platform useful for our customers, **including with respect to developments in AI,** our ability to persuade existing customers to expand their use of our platform to additional use cases and additional applications, and to purchase additional software licenses to our platform. We must continue to invest significant resources in research and development in order to continually improve the speed and power of our platform. We may introduce significant changes to our platform or develop and introduce new and unproven products, including using technologies with which we have little or no prior development or operating experience. If we are unable to continue offering innovative solutions or if new or enhanced solutions fail to engage our customers, we may be unable to attract additional customers or retain our current customers, which may adversely affect our business, operating results, and financial condition. We may need to reduce or change our pricing model to remain competitive **. The market for our platform is still evolving, and competitive dynamics may cause pricing levels to change as the market matures and as existing and new market participants introduce new types of solutions and different approaches to enable customers to address their needs. As a result, we may be forced to reduce the prices we charge for software and may be required to offer terms less favorable to us for new and renewing agreements** . We generally sell our software on a per- user basis or through non- user **-** based single application licenses. We have changed and expect we will continue to need to change our pricing model from time to time. As competitors introduce new products that compete with ours or reduce their prices, we may be unable to attract new customers or retain existing customers based on our historical pricing. We also must determine the appropriate price to enable us to compete effectively internationally. Moreover, mid- to large- size enterprises may demand substantial price discounts as part of the negotiation of sales contracts. As a result, we may be required or choose to reduce our prices or change our pricing model, which could adversely affect our business, operating results, and financial condition. Our business could be adversely affected if our customers are not satisfied with the deployment services provided by us or our partners. The success of our business depends on our customers’ satisfaction with our platform, the support we provide for our platform, and the professional services we provide to help our customers deploy our platform. Professional services may be performed by our own staff, a third party, or a combination of the two. Our strategy is to work with third parties to increase the breadth, capability, and depth of capacity for delivery of these services to our customers, and third parties provide a significant portion of our deployment services. If a customer is not satisfied with the quality of work performed by us or a third party or with the type of applications delivered, we could incur additional costs to address the deficiency, which would diminish the profitability of the customer relationship. Further, a customer' s dissatisfaction with our services could impair our ability to expand the number of licenses to our software purchased by that customer or adversely affect the customer' s renewal of existing licenses. In addition, negative publicity related to our customer relationships, regardless of accuracy, may further damage our business by affecting our ability to compete for new business with actual and prospective customers. We are substantially dependent upon customer renewals, the addition of new customers, and the continued growth of our subscriptions revenue. We derive, and expect to increasingly derive in the future, a substantial portion of our revenue from the sale of software subscriptions. For **2023,** 2022, **and** 2021, ~~and 2020,~~ approximately **75. 6 %,** 72. 7 %, **and** 71. 4 ~~%, and 65. 2~~ %, respectively, of our total revenue was subscriptions revenue ~~. The market for our platform is still evolving, and competitive dynamics may cause pricing levels to change as the market matures and as existing and new market participants introduce new types of solutions and different approaches to enable customers to address their needs. As a result, we may be forced to reduce the prices we charge for software and may be required to offer terms less favorable to us for new and renewing agreements~~ . In order for us to improve our operating results, it is important our customers renew their subscriptions with us when their initial term expires, as well as purchase additional subscriptions from us. In general, our customers have no renewal obligation after their initial term expires, and we cannot provide assurance we will be able to renew subscriptions with any of our customers at the same or higher contract value. Further, while we offer access to our platform primarily through multi- year subscription agreements, some agreements may have shorter durations. Additionally, some of our contracts limit the amount we can increase prices from period to period or include pricing guarantees. If our customers do not renew their agreements, terminate their agreements, renew their agreements on terms less favorable to us, or fail to purchase additional software subscriptions, our revenue may decline and our operating results would likely be harmed as a result. Because we generally recognize revenue from cloud subscriptions ratably over the term of the subscription agreement, near term changes in sales may not be reflected immediately in our operating results. We offer our solution primarily through multi- year cloud subscription agreements and generally recognize revenue ratably over the related subscription period. As a result, much of the revenue we report in each quarter is derived from the recognition of previously unbilled or deferred contract value relating to agreements entered into during prior periods. Accordingly, a decline in new or renewal subscription agreements in any quarter is not likely to be reflected immediately in our revenue results for that quarter. Such declines, however, would negatively affect our revenue, and to a lesser extent, deferred revenue balance in future periods, and the effect of significant downturns in sales and market acceptance of our platform and potential changes in our rate of renewals may not be fully reflected in our results of operations until future periods .We may not achieve market acceptance of our pre- built solutions,which may adversely impact our financial results.We have been developing and releasing pre- built solutions on our software platform in order to maximize the value of our platform to our customers and to reduce the sales cycles associated with software sales to new and existing customers.Each solution requires an investment in development,marketing,sales,support,finance,and legal resources to bring the solution to market.Although we make efforts to identify the solutions that will receive favorable market acceptance,there can be no guarantee any solution will become the source of material revenue,and the investment in the solution may not produce a positive return.If unsuccessful,such solutions may adversely impact our financial results to the extent our expenses increase without any increase in sales or to the extent attempted sales of such solutions reduce sales of our existing platform . If we are not able to maintain and enhance our brand, our business and operating results may be adversely affected. We believe developing and maintaining widespread awareness of our brand in a cost- effective manner is critical to achieving widespread acceptance of our platform and attracting new customers. Brand promotion activities may not generate customer awareness or increase revenue and, even if they do, any increase in revenue may not offset the expenses we incur in building our brand. If we fail to successfully promote and maintain our brand or incur substantial expenses, we may fail to attract or retain customers necessary to realize a sufficient return on our brand- building efforts or to achieve the widespread brand awareness critical for broad customer adoption of our platform. If our platform fails to perform properly or there are defects or disruptions in the rollout of our platform updates or enhancements, our reputation could be adversely affected, our market share could decline, and we could be subject to liability claims. Our platform is inherently complex and may contain material defects or errors. Any defects in functionality, security, or other conditions that cause interruptions in the availability of our platform could result in: • Loss or delayed market acceptance and sales; • Breach of warranty claims; • Sales credits or refunds for prepaid amounts related to unused subscription services; • Loss of customers; • Diversion of development and support resources; and / or • Injury to our reputation. The costs incurred in correcting any material defects or errors might be substantial and could adversely affect our operating results. Our customer agreements often provide service level commitments on a monthly basis. If we are unable to meet the stated service level commitments or suffer extended periods of unavailability for our platform, we may be contractually obligated to provide these customers with service credits or refunds for prepaid amounts, or we could face contract terminations. Our revenue could be significantly affected if we suffer unscheduled downtime that exceeds the allowed downtimes under our agreements with our customers. Because of the large amount of data we collect and manage, it is possible hardware failures or errors in our systems could result in data loss or corruption or cause the information we collect to be incomplete or contain inaccuracies our customers regard as significant. Furthermore, the availability or performance of our platform could be adversely affected by a number of factors, including customers' inability to access the internet, our customers' increased usage of our cloud offering, the failure of our network or software systems, security breaches, or variability in user traffic for our services. For example, our cloud offering customers access our platform through their internet service providers. If a customer' s service provider fails to provide sufficient capacity to support our platform or otherwise experiences service outages, such failure could interrupt our customers' access to our platform, adversely affect their perception of our platform' s reliability, and reduce our revenue. In addition to potential liability, if we experience interruptions in the availability of our cloud offering, our reputation could be adversely affected, and we could lose customers. We also provide frequent incremental releases of software updates and functional enhancements to our platform. Despite extensive pre- release testing, such new versions occasionally contain undetected errors when first introduced or released. We have, from time to time, found errors in our software, and new errors in our existing software may be detected in the future. Since our customers use our software for important aspects of their business, any errors, defects, disruptions in our platform, or other performance problems with our solution could hurt our reputation and may damage our customers' businesses. If that occurs, our customers may delay or withhold payment to us, elect not to renew, or make service credit claims, warranty claims, or other claims against us, and we could lose future sales. The occurrence of any of these events could result in an increase in our bad debt expense, an increase in collection cycles for accounts receivable, decreased future revenue and earnings, require us to increase our warranty provisions, or incur the risk or expense of litigation. We rely upon AWS to operate our cloud offering; any disruption of or interference with our use of AWS would adversely affect our business, results of operations, and financial condition. We outsource substantially all of the infrastructure relating to our cloud offering to AWS, which hosts our platform on our customers' behalf. Customers of our cloud offering need to be able to access our platform at any time, without interruption or degradation of performance, and we provide them with service level commitments with respect to uptime. AWS runs its own platform we access, and we are, therefore, vulnerable to service interruptions at AWS. We may experience **material** interruptions, delays, and outages in service and availability from time to time as a result of problems with our AWS provided infrastructure, which could render our cloud offering inaccessible to customers. Additionally, AWS has suffered outages at specific customer locations in the past, rendering the customer unable to access our offering for periods of time. Lack of availability of our AWS infrastructure could be due to a number of potential causes including technical failures, natural disasters, fraud, or security attacks we cannot predict or prevent. Such outages could lead to the triggering of our service level agreements and the issuance of credits to our cloud offering customers, which may impact our operating results. In addition, if the security of the AWS infrastructure is compromised or believed to have been compromised, our business, results of operations, and financial condition could be adversely affected. It is possible our customers and potential customers would hold us accountable for any breach of security affecting the AWS infrastructure, and we may incur significant liability from those customers and from third parties with respect to any breach affecting AWS systems. Because our agreement with AWS limits AWS' s liability for damages, we may not be able to recover a material portion of our liabilities to our customers and third parties from AWS. Customers and potential customers may refuse to do business with us because of the perceived or actual failure of our cloud offering as hosted by AWS, and our operating results could be harmed. Our agreement with AWS allows AWS to terminate the agreement by providing two years' prior written notice and may allow AWS to terminate in case of a breach of contract if such breach is uncured for 30 days or to terminate upon 30 days ~~'~~ **'** advance written notice if AWS' s further provision of services to us becomes impractical for legal or regulatory reasons. Although we expect we could receive similar services from other third parties if any of our arrangements with AWS are terminated, we could experience interruptions on our platform and in our ability to make our platform available to customers, as well as delays and additional expenses in arranging alternative cloud infrastructure services. Our growth depends in part on the success of our strategic relationships with third parties. In order to grow our business, we anticipate we will continue to depend on relationships with strategic partners to provide broader customer coverage and solution delivery capabilities. Identifying partners, and negotiating and documenting relationships with them, requires significant time and resources. Our agreements with our strategic partners are non- exclusive and do not prohibit them from working with our competitors or offering competing solutions. Our competitors may be effective in providing incentives to third parties to favor their products or services or to prevent or reduce subscriptions to our services. If our partners choose to place greater emphasis on products of their own or those offered by our competitors or do not effectively market and sell our platform, our ability to grow our business and sell software and professional services may be adversely affected. In addition, acquisitions of our partners by our competitors could result in a decrease in the number of our current and potential customers, as our partners may no longer facilitate the adoption of our platform by potential customers. If we are unsuccessful in establishing or maintaining our relationships with third parties, our ability to compete in the marketplace or to grow our revenue could be impaired and our operating results may suffer. Even if we are successful, we cannot be sure these relationships will result in increased customer usage of our platform or increased revenue. Because our long- term growth strategy involves further expansion of our sales to customers outside the United States, our business will be susceptible to risks associated with international operations. A component of our growth strategy involves the further expansion of our operations and customer base internationally. In **2023,** 2022, **and** 2021 ~~, and 2020~~, revenue generated from customers outside the United States was **35. 8 %,** 33. 5 %, **and** 34. 0 ~~%, and 33. 8~~ %, respectively, of our total revenue. We currently operate in Canada, Switzerland, the United Kingdom, France, Germany, the Netherlands, Italy, Australia, Spain, Singapore, Sweden, Japan, Mexico, ~~and~~ India **, and Portugal** . In the future, we may expand to other international locations. Our current international operations and future initiatives will involve a variety of risks, including: • Changes in a specific country' s or region' s political or economic conditions; • Unexpected changes in regulatory requirements, taxes, or trade laws; • More stringent regulations relating to data security and the unauthorized use of, or access to, commercial and personal information, particularly in the European Union; • Differing labor regulations, especially in the European Union, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations; • Challenges inherent in efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits, and compliance programs; • Difficulties in managing a business in new markets with diverse cultures, languages, customs, legal systems, alternative dispute systems, and regulatory systems; • Increased travel, real estate, infrastructure, and legal compliance costs associated with international operations; • Currency exchange rate fluctuations and the resulting effect on our revenue and expenses, and the cost and risk of entering into hedging transactions if we choose to do so in the future; • Limitations on our ability to reinvest earnings from operations in one country to fund the capital needs of our operations in other countries; • Laws and business practices favoring local competitors or general preferences for local vendors; • Limited or insufficient levels of protection of our corporate proprietary information and assets, including intellectual property and customer information and records; • Political instability or terrorist activities; • Exposure to liabilities under anti- corruption and anti- money laundering laws, including the U. S. Foreign Corrupt Practices Act and similar laws and regulations in other jurisdictions; and • Adverse tax burdens and foreign exchange controls that could make it difficult to repatriate earnings and cash. Our limited experience in operating our business internationally increases the risk any potential future expansion efforts we may undertake will not be successful. If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business and operating results will suffer. We may require additional capital to support business growth, and this capital might not be available on acceptable terms, if at all. We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new features or enhance our platform, improve our operating infrastructure, or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional funds through future issuances of equity or convertible debt securities, our existing stockholders could suffer significant dilution, and any new equity securities we issue could have rights, preferences, and privileges superior to those of holders of our Class A common stock. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be adversely affected. **We have obtained a substantial judgment against our competitor, Pegasystems, for willful and malicious trade secret misappropriation, and elements of our ability to obtain payment with respect to that judgment are subject to risk. On May 9, 2022, a jury returned a verdict that Pegasystems, Inc., willfully and maliciously misappropriated trade secrets from us and awarded us $ 2. 036 billion in damages for Pegasystems' unjust enrichment for usage of our trade secrets. A judge entered a final judgment on that verdict on September 15, 2022 and further granted us $ 23. 6 million in attorney' s fees as well as statutory post- judgment interest at an annual rate of 6 %, or approximately $ 122. 0 million per year. Pegasystems has appealed the final judgment to the Virginia Court of Appeals, and the appeal is pending. In September 2023, we obtained a judgment preservation insurance policy that would pay us up to $ 500. 0 million in coverage to the extent the final judgment were reversed or reduced after all appeals and further litigation are exhausted. While we believe strongly the final judgment should be upheld, we cannot guarantee it will be upheld in its entirety or in part. In addition, while Pegasystems has made public assurances that it could raise the funds necessary to pay the judgment, it does not currently have the cash necessary to satisfy the full amount of the final judgment, and we would be at risk of having to collect a substantial judgment as a creditor if Pegasystems is unable to raise the necessary funds when and if the final judgment becomes enforceable. Finally, as with any insurance policy, our ability to collect judgment preservation insurance proceeds is subject to the financial soundness of the insurers underwriting our policy, as well as any denial of coverage under the policy. While we have not included any payment from Pegasystems or insurance proceeds in our financial statements or operational planning, any failure to collect on all or a portion of the judgment or the insurance proceeds may be viewed negatively and our stock price could decline. We maintain cash deposits in excess of federally insured limits. Adverse developments affecting financial institutions, including bank failures, could adversely affect our liquidity and financial performance. We regularly maintain domestic cash deposits in banks insured by the Federal Deposit Insurance Corporation (the " FDIC ") that exceed the FDIC insurance limits. Bank failures, events involving limited liquidity, defaults, non- performance or other adverse developments that affect financial institutions, or concerns or rumors about such events, may lead to liquidity constraints. For example, on March 10, 2023, Silicon Valley Bank (" SVB ") was closed by the California Department of Financial Protection and Innovation, and the FDIC was appointed receiver of SVB. If other banks and financial institutions enter receivership or become insolvent in the future due to financial conditions affecting the banking system and financial markets, our ability to access our cash, cash equivalents, and investments, including transferring funds, making payments, or receiving funds may be threatened and could have a material adverse effect on our business and financial condition. There can be no assurance our deposits in excess of the FDIC or other comparable insurance limits will be backstopped by the U. S. government or that any bank or financial institution with which we do business will be able to obtain needed liquidity from other banks, government institutions, or by acquisition in the event of a failure or liquidity crisis.** Pursuant to the terms of our outstanding indebtedness, we may be limited in our ability to incur future debt. **We have** ~~In November 2022, we entered into~~ a Senior Secured Credit Facilities Credit Agreement (as amended from time to time, the " Credit ~~Facility~~ **Agreement** ") with the several banks and other financial institutions or entities from time to time parties to the Credit ~~Facility~~ **Agreement** , as lenders, and ~~Silicon Valley~~ **First Citizen** Bank **& Trust Company** , as administrative agent and collateral agent for the lenders, which **as of December 31, 2023,** provides for a five- year term loan facility in an aggregate principal amount of $ ~~120~~ **150** . 0 million and up to $ ~~60~~ **75** . 0 million for a revolving credit facility, including a letter of credit sub- facility in the aggregate availability amount of $ 15. 0 million and a swingline sub- facility in the aggregate availability amount of $ 10. 0 million (as a sublimit of the revolving loan facility). Our obligations under the Credit ~~Facility~~ **Agreement** are secured by substantially all of our assets. Pursuant to the terms of the Credit ~~Facility~~ **Agreement** , we are limited in our ability to incur additional indebtedness other than on the terms and conditions thereof. In addition, a failure to comply with the covenants under the Credit ~~Facility~~ **Agreement** could result in an event of default by us and an acceleration of amounts due. If an event of default occurs that is not waived by the lenders, and the lenders accelerate any amounts due, we may not be able to make accelerated payments, and the lender could seek to enforce their security interests in the collateral securing such indebtedness, which could have a material adverse effect on our business and results of operations . We may not achieve market acceptance...... solutions reduce sales of our existing platform . If currency exchange rates fluctuate substantially in the future, our financial results, which are reported in U. S. dollars, could be adversely affected. Generally, contracts executed by our foreign operations are denominated in the currency of that country or region and a portion of our revenue is therefore subject to foreign currency risks. As we continue to expand our international operations, we become more exposed to the effects of fluctuations in currency exchange rates. A strengthening of the U. S. dollar could reduce the dollar value of revenue generated by our customers outside of the United States, adversely affecting our business operations and financial results. We incur expenses for employee compensation and other operating expenses at our non- U. S. locations in the local currency, and fluctuations in the exchange rates between the U. S. dollar and other currencies could result in the dollar equivalent of such expenses being higher. This could have a negative impact on our reported operating results. To date, we have not engaged in any hedging strategies, and any such strategies such as forward contracts, options, and foreign exchange swaps related to transaction exposures we may implement to mitigate this risk may not eliminate our exposure to foreign exchange fluctuations. We employ third- party licensed software for use in or with our software, and the inability to maintain these licenses or errors in the software we license could result in increased costs or reduced service levels, which would adversely affect our business. Our software incorporates certain third- party software obtained under licenses from other companies, including database software from Kx Systems. We anticipate we will continue to rely on such third- party software and development tools from third parties in the future. Although we believe there are commercially reasonable alternatives to the third- party software we currently license, including open source software, this may not always be the case, or it may be difficult or costly to migrate to other third- party software. Our use of additional or alternative third- party software would require us to enter into license agreements with third parties. In addition, integration of the third- party software used in our software with new third- party software may require significant work and require substantial investment of our time and resources. Also, any undetected errors or defects in third- party software could prevent the deployment or impair the functionality of our software, delay new updates or enhancements to our platform, or result in a failure of our platform, injuring our reputation. If we do not or cannot maintain the compatibility of our platform with third- party applications that our customers use in their businesses, our revenue will decline. The functionality and attractiveness of our platform depends, in part, on our ability to integrate our platform with third- party applications and platforms, including customer relationship management, human resources information, accounting, and enterprise resource planning systems our customers use and from which they obtain data. Third- party providers of applications and **application programming interfaces, or** APIs **,** may change the features of their applications and platforms, restrict our access to their applications and platforms, or alter the terms governing use of their applications and APIs and access to those applications and platforms in an adverse manner. Such changes could functionally limit or terminate our ability to use these third- party applications and platforms in conjunction with our platform, which could negatively impact our offerings and harm our business. If we fail to integrate our software with new third- party applications and platforms our customers use, we may not be able to offer the functionality our customers need, which would negatively impact our ability to generate revenue and adversely impact our business. Catastrophic events may disrupt our business. Our corporate headquarters are located in northern Virginia. The area around Washington, D. C. could be subjected to domestic or foreign terrorist attacks. Additionally, we rely on our network and third- party infrastructure and enterprise applications, internal technology systems, and our website for our development, marketing, operational support, hosted services, and sales activities. In the event of a major hurricane, earthquake, or catastrophic event such as fire, power loss, telecommunications failure, cyberattack, outbreak of regional or global pandemic diseases, war, or terrorist attack, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our software development, lengthy interruptions in our services, breaches of data security, and loss of critical data, all of which could have an adverse effect on our future operating results. Adverse economic conditions **abroad** may negatively impact our business. Our business depends on the overall demand for enterprise software and on the economic health of our current and prospective customers. The economies of countries in Europe have ~~been experiencing~~ **experienced** weakness ~~associated with high sovereign debt levels,~~ **from time to time in the recent past and may experience** weakness in the ~~banking sector, and uncertainties surrounding the~~ future ~~of the Euro zone~~ . We have operations in the United Kingdom and in Europe and current and potential new customers in Europe. If economic conditions in Europe and other key markets for our platform **weaken** ~~continue to remain uncertain~~ or deteriorate ~~further~~ , many customers may delay or reduce their information technology spending. This could result in reductions in sales of our platform, a decrease in our renewal rate, longer sales cycles, reductions in subscription duration and value, slower adoption of new technologies, and increased price competition. Any of these events would likely have an adverse effect on our business, operating results, and financial position. Future acquisitions could disrupt our business and adversely affect our business operations and financial results. In the past we have chosen and may continue to choose, to expand by acquiring businesses or technologies. Our ability as an organization to successfully acquire and integrate technologies or businesses is unproven. Acquisitions involve many risks, including the following: • An acquisition may negatively affect our financial results because it may require us to incur charges or assume substantial debt or other liabilities, may cause adverse tax consequences or unfavorable accounting treatment, may expose us to claims and disputes by third parties, including intellectual property claims and disputes, or may not generate sufficient financial return to offset additional costs and expenses related to the acquisition; • We may encounter difficulties or unforeseen expenditures in integrating the business, technologies, products, personnel, or operations of any company we acquire, particularly if key personnel of the acquired company decide not to work for us; • An acquisition may disrupt our ongoing business, divert resources, increase our expenses, and distract our management; • An acquisition may result in a delay or reduction of customer purchases for both us and the company acquired due to customer uncertainty about continuity and effectiveness of service from either company; • We may encounter difficulties in successfully selling, or may be unable to successfully sell, any acquired solutions; • An acquisition may involve the entry into geographic or business markets in which we have little or no prior experience or where competitors have stronger market positions; • Our use of cash to pay for an acquisition would limit other potential uses for our cash; and • If we incur debt to fund such acquisition, such debt may subject us to material restrictions on our ability to conduct our business as well as financial maintenance covenants. The occurrence of any of these risks could have a material adverse effect on our business operations and financial results. In addition, we may only be able to conduct limited due diligence on an acquired company' s operations. Following an acquisition, we may be subject to unforeseen liabilities arising from an acquired company' s past or present operations, and these liabilities may be greater than the warranty and indemnity limitations we negotiate. Any unforeseen liability greater than these warranty and indemnity limitations could have a negative impact on our financial condition. Risks Related to Regulatory Compliance and Governmental Matters Failure to comply with governmental laws and regulations 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. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, injunctions, or other collateral 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 and an increase in professional fees. Enforcement actions and sanctions could harm our business, reputation, results of operations, and financial condition. Because **we** ~~our software could be used to~~ collect and store personal information, domestic and international privacy and security concerns could result in additional costs and liabilities to us ~~or~~ **,** inhibit sales of our software **,** and subject us to complex and evolving federal, state, and foreign laws and regulations regarding privacy, data protection, and other related matters. Personal privacy has become a significant issue in the United States and in many other countries where we offer our software for sale. The regulatory framework for privacy issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. ~~Many federal,~~ **An increasing number of countries and U. S.** ~~state~~ **states** ~~, and foreign government bodies and agencies~~ have ~~adopted or~~ **enacted comprehensive privacy laws, and many** are considering adopting **additional** laws ~~and~~ **, rules,** regulations **, and industry standards** regarding the collection, use, storage, ~~and disclosure~~ **or other processing** of **data** ~~personal information and breach notification procedures~~ . Interpretation of these laws, rules, and regulations and their application to our software and professional services **, as well as to our corporate and marketing activities** in the United States and foreign jurisdictions **,** is ongoing and cannot be fully determined at this time. In the United States, these include rules and regulations promulgated under the authority of the Federal Trade Commission, the Electronic Communications Privacy Act, the Computer Fraud and Abuse Act, the Health Insurance Portability and Accountability Act of 1996, the Gramm Leach Bliley Act, the California Consumer Privacy Act **(as modified by the California Privacy Rights Act)** , or the CCPA, and other state laws relating to privacy and data security. The CCPA ~~, which became effective on January 1, 2020, drastically changes the ability for individuals to control the use of their personal data. It~~ contains detailed requirements regarding collecting and processing personal information, imposes certain limitations on how such information may be used, and provides rights to consumers that have never before been available, all of which may be imposed on us by our customers. ~~This could increase our costs of doing business.~~ Further, the ~~California Privacy Rights Act, or CPRA, which became effective on January 1, 2023, has significantly modified the~~ CCPA ~~, including by expanding~~ **expands** consumers' rights with respect to certain sensitive personal information. **Some** ~~The CPRA also created a new~~ state **laws may be more stringent** ~~agency, the California Privacy Protection Agency,~~ or ~~CPPA, that is vested~~ **broader in scope or offer greater individual rights** with ~~authority~~ **respect** to ~~implement~~ **confidential, sensitive,** and ~~enforce~~ **personal information than federal, international, or** ~~the~~ **other** ~~CCPA~~ **state laws,** and **such laws may differ from each** ~~the~~ **other** ~~CPRA~~ **, which may complicate compliance efforts** . New legislation proposed or enacted in various other states will continue to shape the data privacy environment nationally ~~. For example, Virginia passed the Consumer Data Protection Act, which became effective on January 1, 2023 and Colorado passed the Colorado Privacy Act, which becomes effective July 1, 2023, both of which differ from the CPRA. Some of these state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to confidential, sensitive, and personal information than federal, international, or other state laws, and such laws may differ from each other, which may complicate compliance efforts~~ . Internationally, the European Union has adopted a comprehensive and evolving general data protection regulation, or the GDPR, which contains numerous requirements related to rights of data subjects in their personal data, including more robust obligations on data processors and heavier documentation requirements for data protection compliance programs by companies in general. In addition, absent appropriate safeguards or other circumstances, the ~~EU~~ GDPR generally restricts the transfer of personal data to non- adequate countries **and / or organizations** outside of the European Economic Area, or EEA, such as **India, Australia, and non- certified organizations in** the United States, which the European Commission does not consider to provide an adequate level of data privacy and security. ~~The European Commission released a revised set~~ **In July 2023, the new EU- US Data Privacy Framework (" EU- US DPF "), the replacement for the invalidated EU- US Privacy Shield, came into force, allowing U. S. businesses to become certified as adequate for the purposes of data transfers from the EEA, no longer always necessitating the signature** of " Standard Contractual Clauses **.** " ~~in June 2021 that are designed to be a valid mechanism by which entities can transfer personal data out of the EEA to jurisdictions that the European Commission has not found to provide an adequate level of protection. Currently, these new Standard Contractual Clauses are a valid mechanism to transfer personal data outside of the EEA.~~ The ~~revised Standard Contractual Clauses~~ **EU- US DPF** , however, **still** ~~require~~ **requires** parties relying upon that legal mechanism to comply with ~~additional~~ obligations ~~,~~ **similar to those required under the Standard Contractual Clauses** such as conducting transfer impact assessments to determine whether additional security measures are necessary to protect the at- issue personal data. ~~Moreover~~ **Appian is currently certified under the new EU- US Data Privacy Framework. However** , due to potential legal challenges, there exists some uncertainty regarding whether the new **EU- US DPF or the** Standard Contractual Clauses will remain a valid mechanism for transfers of personal data out of the EEA. ~~Similarly~~ **Additionally, new EU legislation which came into force in 2023 such as the Digital Services Act (impacting online advertising), the Digital Markets Act (impacting those providing core platform services), the Data**

Governance Act (impacting public sector data), and the NIS2 Directive (cybersecurity) impact our own activities, those of our regulated and public sector customers, and those of our significant partners such as AWS. While the U. K. , following Brexit, ~~we are subject~~ **is currently considered** to **hold adequacy for** the **purposes of data transfers from the EEA, proposed changes to** U. K. ~~General~~ **privacy legislation may impact the U. K.' s adequacy standing. The UK' s** Data Protection ~~Regulation, or U. K.~~ **Act of 2018 as supplemented by the** GDPR **and** ~~, a version of the GDPR~~ as implemented into **UK** ~~U. K.~~ law **(collectively, " UK GDPR ") imposes similar, stringent data protection requirements to the GDPR. While the UK GDPR currently imposes substantially the same obligations as the GDPR, the UK GDPR will not automatically incorporate changes to the GDPR going forward (which would need to be specifically incorporated by the UK government). Moreover, the UK government has publicly announced plans to reform the UK GDPR in ways** that ~~combines~~ **, if formalized, are likely to deviate from** the GDPR ~~and the U. K. Data Protection Act of 2018. U. K.- based data exporters are required to use the International Data Transfer Agreement~~ , ~~or IDTA,~~ **all of which creates a risk of divergent parallel regimes** and **related uncertainty** ~~the International Data Transfer Addendum to the European Commission' s Standard Contractual Clauses~~ , **along** ~~or the U. K. Addendum, as mechanisms to comply~~ with the **potential for increased compliance costs and risks for affected businesses** ~~U. K. GDPR when making restricted international transfers of personal data~~ . Virtually every jurisdiction **or regulated industry** in which we operate has established its own data security and privacy legal framework with which we or our customers must comply. Since we **operate across a variety of industries** ~~are agnostic as to the data uploaded into our cloud offering by our cloud offering customers or processed by our platform in on- premises deployments~~ , we may be hosting or otherwise processing substantial amounts of ~~individually~~ **sensitive or otherwise regulated personal information such as** identifiable health information ~~and other types of personally identifiable information~~ . The effects of any of this legislation ~~,~~ and future changes to interpretations of this legislation ~~,~~ could be potentially far- reaching and ~~may~~ **will** require us to modify our data management practices and to incur substantial expense in an effort to comply. In addition to government regulation, privacy advocates and industry groups may propose new and different self- regulatory standards that may apply to us. Because the interpretation and application of privacy and data protection laws are still uncertain, it is possible these laws and other actual or alleged legal obligations such as contractual or self- regulatory obligations may be interpreted and applied in a manner inconsistent with our existing data management practices or the features of our platform. If so, in addition to the possibility of fines, lawsuits, and other claims, we could be required to fundamentally change our business activities and practices or modify our software, which could have an adverse effect on our business. Any inability to adequately address privacy or cybersecurity concerns, even if unfounded, or comply with applicable privacy or data protection laws, regulations, and policies ~~,~~ could result in additional cost and liability to us, damage our reputation, inhibit sales, and adversely affect our business. Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations, and policies applicable to the businesses of our customers may limit the use and adoption of, and reduce the overall demand for, our platform. Privacy concerns, whether valid or not valid, may inhibit market adoption of our platform, particularly in certain industries and foreign countries. If our platform fails to function in a manner allowing our customers to operate in compliance with regulations and / or industry standards, our revenue and operating results could be harmed. Certain of our customers use our platform to create applications that ensure secure communications given the nature of the content being distributed and associated applicable regulatory requirements. As attitudes towards privacy and data security evolve governmental and other customers may also require our platform to comply with certain privacy, security, and other certifications and standards that are specialized or industry- specific. Our cloud platform holds various security certifications from government agencies and industry organizations, including the Federal Risk and Authorization Management Program, or FedRAMP, compliance and HITRUST certification. It also meets the ISO 27001, Payment Card Industry Data Security Standard, or PCI DSS, and the various United States Health Insurance Portability and Accountability Act, or HIPAA, standards. Governments and industry organizations may also adopt new laws, regulations, or requirements or make changes to existing laws or regulations that could impact the demand for, or value of, our applications such as the European Banking Authority' s regulations updated in September 2019 and the CCPA that took effect January 1, 2020. If we fail to maintain our current security certifications and / or to continue to meet security standards, or if we are unable to adapt our platform to changing legal and regulatory standards or other requirements in a timely manner, our customers may lose confidence in our platform, and our business could be negatively impacted. Changes in laws and regulations related to the internet or changes in the internet infrastructure itself may diminish the demand for our platform and could have a negative impact on our business. The future success of our business, and particularly our cloud offering, depends upon the continued use of the internet as a primary medium for commerce, communication, and business applications. Federal, state, or foreign government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting the use of the internet as a commercial medium. Changes in these laws or regulations could require us to modify our platform in order to comply with these changes. In addition, government agencies or private organizations may begin to impose taxes, fees, or other charges for accessing the internet or commerce conducted via the internet. These laws or charges could limit the growth of internet- related commerce or communications generally, resulting in reductions in the demand for internet- based solutions such as ours. In addition, the use of the internet as a business tool could be adversely affected due to delays in the development or adoption of new standards and protocols to handle increased demands of internet activity, security, reliability, cost, ease of use, accessibility, and quality of service. The performance of the internet and its acceptance as a business tool have been adversely affected by viruses, worms, and similar malicious programs, along with distributed denial of service ~~, or~~ **("** DDoS **")** , and similar attacks. As a result, the internet has experienced a variety of outages and other delays as a result of such damage to or attacks on portions of its infrastructure. If the use of the internet is adversely affected by these issues, demand for our platform could suffer. We are subject to anti- corruption laws with respect to our domestic and international operations, and non- compliance with such laws can subject us to criminal and / or civil liability and materially harm our business. We are subject to the U. S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, the U. S. domestic bribery statute contained in 18 U. S. C. § 201, the U. S. Travel Act, the United Kingdom Bribery Act 2010, and other anti- corruption laws in countries in which we conduct activities. Anti- corruption laws are interpreted broadly and prohibit our company from authorizing, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We use third- party law firms, accountants, and other representatives for regulatory compliance, sales, and other purposes in several countries. We can be held liable for the corrupt or other illegal activities of these third- party representatives, our employees, contractors, and other agents, even if we do not explicitly authorize such activities. In addition, although we have implemented policies and procedures to ensure compliance with anti- corruption laws, there can be no assurance all of our employees, representatives, contractors, or agents will comply with these laws at all times. Non- compliance with these laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and / or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas or investigations are launched, or governmental or other 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 harmed. In addition, responding to any action will likely result in a materially significant diversion of management' s attention and resources and significant defense costs and other professional fees. Enforcement actions and sanctions could further harm our business, results of operations, and financial condition. Moreover, as an issuer of securities, we also are subject to the accounting and internal controls provisions of the FCPA. These provisions require us to maintain accurate books and records and a system of internal controls sufficient to detect and prevent corrupt conduct. Failure to abide by these provisions may have an adverse effect on our business, operations, or financial condition. We are subject to governmental export and import controls and economic and trade sanctions that could impair our ability to conduct business in international markets and subject us to liability if we are not in compliance with applicable laws and regulations. The United States and other countries maintain and administer export and import laws and regulations, including various economic and trade sanctions such as those administered by the Office of Foreign Assets Control ~~, or~~ **("** OFAC **")** , which apply to our business. We are required to comply with these laws and regulations. If we fail to comply with such laws and regulations, we and certain of our employees could be subject to substantial civil or criminal penalties, including the possible loss of export or import privileges, fines which may be imposed on us and responsible employees or managers, and, in extreme cases, the incarceration of responsible employees or managers. Changes in our platform, or changes in applicable export or import laws and regulations, may create delays in the introduction and sale of our platform in international markets or, in some cases, prevent the export or import of our platform to certain countries, governments, or persons altogether. Any change in export or import laws and regulations or economic or trade sanctions, shift in the enforcement or scope of existing laws and regulations, or change in the countries, governments, persons, or technologies targeted by such laws and regulations could also result in decreased use of our platform or in our decreased ability to export or sell our platform to existing or potential customers. Any decreased use of our services or limitation on our ability to export or sell our services would likely adversely affect our business, financial condition, and results of operations. We incorporate encryption technology into certain of our products. Encryption products may be exported outside of the United States only with the required export authorization, including by license, license exception, or other appropriate government authorization. Obtaining the necessary export license or other authorization for a particular sale may be time- consuming and may result in the delay or loss of sales opportunities. In addition, various countries regulate the import of certain encryption technology, including import permitting and licensing requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Although we take precautions to prevent our products from being provided in violation of such laws, our products may have been in the past, and could in the future, be provided inadvertently in violation of such laws, despite the precautions we take. Governmental regulation of encryption technology and regulation of imports or exports, or our failure to obtain required import or export approval for our products, could harm our international sales and adversely affect our revenue. Moreover, U. S. export control laws and economic sanctions programs prohibit the provision of services to countries, governments, and persons subject to U. S. economic embargoes and trade sanctions. Even though we take precautions to prevent our platform from being used by U. S. sanctions targets, our platform could be used by a sanctioned person or in an embargoed country despite such precautions. Any such shipment could have negative consequences, including government investigations, penalties, and reputational harm. Risks Related to Our Intellectual Property Any failure to protect our proprietary technology and intellectual property rights could substantially harm our business and operating results. Our success and ability to compete depend in part on our ability to protect our proprietary technology and intellectual property. To safeguard these rights, we rely on a combination of patent, trademark, copyright, and trade secret laws and contractual protections in the United States and other jurisdictions, all of which provide only limited protection and may not now or in the future provide us with a competitive advantage. As of December 31, ~~2022~~ **2023** , we had ~~11~~ **16** issued patents and ~~six~~ **nine** pending patent applications related to our platform and its technology. We have registered the " Appian " name and logo in the United States and certain other countries. We have registrations and / or pending applications for additional marks in the United States. We cannot provide assurance that any current or future applications for registrations for patent or trademark applications will result in the grant of any valid, enforceable intellectual property rights. Further, we cannot provide assurance that any granted patent or trademark will provide the protection we seek, will be valid if challenged, or will be sufficiently broad in actions against alleged infringers. Moreover, any of our granted intellectual property rights may be rendered invalid by future changes in the law, defects in our prosecution processes, or preexisting technology, rights, or marks. In order to protect our unpatented proprietary technologies and processes, we rely on trade secret laws and confidentiality and invention assignment agreements with our employees, consultants, strategic partners, vendors, and others. Despite our efforts to protect our proprietary technology and trade secrets, unauthorized parties may attempt to misappropriate, copy, reverse engineer, or otherwise obtain and use them. In addition, others may independently discover our trade secrets, in which case we would not be able to assert trade secret rights or develop similar technologies and processes. Further, the contractual provisions we enter into may not prevent unauthorized use or disclosure of our proprietary technology or intellectual property rights and may not provide an adequate remedy in the event of any such unauthorized use or disclosure. Policing unauthorized use of our technologies, trade secrets, and intellectual property is difficult, expensive, and time- consuming, particularly in foreign countries where the laws may not be as protective of intellectual property rights as those in the United States and where mechanisms for enforcement of intellectual property rights may be weak. To the extent we expand our activities outside of the United States, our exposure to unauthorized copying and use of our platform and proprietary information may increase. We may be unable to determine the extent of any unauthorized use or infringement of our platform, technologies, or intellectual property rights. There can be no assurance the steps we take will be adequate to protect our proprietary technology and intellectual property, that others will not develop or patent similar or superior technologies, products or services, or that our trademarks, patents, and other intellectual property will not be challenged, invalidated, or circumvented by others. Furthermore, effective trademark, patent, copyright, and trade secret protection may not be available in every country in which our software is available or where we have employees or independent contractors. In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect these rights. Litigation brought to protect and enforce our intellectual property rights has been and could be costly, time- consuming, and distracting to management and could result in the impairment or loss of portions of our intellectual property. Furthermore, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims, and countersuits attacking the validity and enforceability of our intellectual property rights. Our failure to secure, protect, and enforce our intellectual property rights could seriously adversely affect our brand and impact our business. We may be subject to intellectual property rights claims by third parties, which are extremely costly to defend, could require us to pay significant damages, and could limit our ability to use certain technologies. Companies in the software and technology industries, including some of our current and potential competitors, own significant numbers of patents, copyrights, trademarks, and trade secrets and frequently enter into litigation based on allegations of infringement or other violations of intellectual property rights. In addition, many of these companies have the capability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. The litigation may involve patent holding companies or other adverse patent owners that have no relevant product revenue and against which our patents may therefore provide little or no deterrence. In the past, we have been subject to allegations of patent infringement that were unsuccessful, and we may in the future be subject to claims we have misappropriated, misused, or infringed other parties' intellectual property rights, and, to the extent we gain greater market visibility or face increasing competition, we face a higher risk of being the subject of intellectual property infringement claims, which is not uncommon with respect to enterprise software companies. We also generally grant our customers ownership of any custom applications we develop for them, subject to our continued ownership of our pre- existing intellectual property rights and, in the past, a customer for whom we have developed custom applications has incorrectly alleged applications we have independently developed infringed the customer' s intellectual property rights. In addition, we have in the past, and may in the future, be subject to claims that our employees, contractors, or we ourselves have inadvertently or otherwise used or disclosed trade secrets or other proprietary information of our competitors or other parties. To the extent intellectual property claims are made against our customers based on their usage of our technology, we have certain obligations to indemnify and defend such customers from those claims. The term of our contractual indemnity provisions often survives termination or expiration of the applicable agreement. Large indemnity payments, defense costs, or damage claims from contractual breach could harm our business, results of operations, and financial condition. There may be third- party intellectual property rights, including issued or pending patents that cover significant aspects of our technologies or business methods. Any intellectual property claims, with or without merit, could be very time- consuming, expensive to settle or litigate, divert our management' s attention and other resources, and result in adverse publicity. These claims could also subject us to making substantial payments for legal fees, settlement payments, and other costs or damages, potentially including treble damages if we are found to have willfully infringed patents or copyrights. These claims could also result in our having to stop making, selling, offering for sale, or using technology found to be in violation of a third party' s rights. We might be required to seek a license for the third- party intellectual property rights, which may not be available on reasonable terms or at all. Moreover, to the extent we only have a license to any intellectual property used in our platform, there may be no guarantee of continued access to such intellectual property, including on reasonable terms. As a result, we may be required to develop alternative non- infringing technology, which could require significant effort and expense. If a third party is able to obtain an injunction preventing us from accessing such third- party intellectual property rights, or if we cannot license or develop technology for any infringing aspect of our business, we would be forced to limit or stop sales of our software or cease business activities covered by such intellectual property and may be unable to compete effectively. Any of these results would adversely affect our business, results of operations, financial condition, and cash flows. **Further, our use of AI technologies internally and implemented as part of our platform may expose us to additional risks regarding our intellectual property. For more information on the legal and regulatory risks associated with the use of AI, please see our risk factors above at " — AI is a disruptive set of technologies that may affect the markets for our software dramatically and in unpredictable ways, " and " — Regulatory and legislative developments related to the use of AI could adversely affect our use of such technologies in our products, services, and business. "** Portions of our platform utilize open source software, and any failure to comply with the terms of one or more of these open source licenses could negatively affect our business. Our software contains software licensed to us by third parties under so- called " open source " licenses, including the GNU Lesser General Public License, the BSD License, and others. From time to time, there have been claims against companies that distribute or use open source software in their products and services, asserting such open source software infringes the claimants' intellectual property rights. We could be subject to suits by parties claiming what we believe to be licensed open source software infringes their intellectual property rights. Use and distribution of open source software may entail greater risks than use of third- party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, certain open source licenses require source code for software programs subject to the license be made available to the public and that any modifications or derivative works to such open source software continue to be licensed under the same terms. Although we monitor our use of open source software in an effort both to comply with the terms of the applicable open source licenses and to avoid subjecting our software to conditions we do not intend, the terms of many open source licenses have not been interpreted by U. S. courts, and there is a risk these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our platform. By the terms of certain open source licenses, we could be required to release the source code of our software and to make our software available under open source licenses, if we combine or distribute our software with open source software in a certain manner. In the event portions of our software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re- engineer all, or a portion of, that software or otherwise be limited in the licensing of our software, each of which could reduce or eliminate the value of our platform. Many of the risks associated with usage of open source software cannot be eliminated and could negatively affect our business, results of operations, and financial condition. Risks Related to Tax and Accounting Matters If our estimates or judgments relating to our critical accounting ~~policies~~ **estimates** prove to be incorrect, our results of operations could be adversely affected. The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions we believe to be reasonable under the circumstances, as provided in Part II, Item 7, " Management' s Discussion and Analysis of Financial Condition and Results of Operations " of this Annual Report on Form 10- K. The results of these estimates form the basis for making judgments about the ~~carrying values of assets, liabilities, and equity as well as the~~ amount of revenue ~~and expenses~~ . Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition ~~, income taxes and the related valuation allowance, stock- based compensation, impairment of goodwill and long- lived assets, and business combinations~~ . Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions **in our critical accounting policies** , which could cause our results of operations to fall below the expectations of securities analysts and investors, resulting in a decline in the trading price of our Class A common stock. Our operating results may be negatively affected by additional tax liabilities. We currently collect and remit sales and use, value added, and other transaction taxes in certain of the jurisdictions where we do business based on our assessment of whether tax is owed by us in such jurisdictions. However, in some jurisdictions in which we do business, we do not believe we owe such taxes, and therefore we currently do not collect and remit such taxes or record contingent tax liabilities in those jurisdictions. Further, due to uncertainty in the application and interpretation of applicable tax laws in various jurisdictions, we may be exposed to sales and use, value added, or other transaction tax liability. A successful assertion that we are required to pay additional taxes in connection with sales of our platform, or the imposition of new laws or regulations requiring the payment of additional taxes, would create increased costs and administrative burdens for us. If we are subject to additional taxes and determined to offset such increased costs by collecting and remitting sales taxes from our customers, or otherwise passing those costs through to our customers, companies may be discouraged from using our platform. Any increased tax burden may decrease our ability or willingness to compete in relatively burdensome tax jurisdictions, result in substantial tax liabilities related to past sales, or otherwise harm our business and operating results. In addition, as a multinational organization, we may be subject to taxation in several jurisdictions around the world with increasingly complex tax laws and the amount of taxes we pay in these jurisdictions could increase substantially as a result of changes in the applicable tax principles, including increased tax rates, new tax laws, or revised interpretations of existing tax laws and precedents. Furthermore, the authorities in these jurisdictions could review our tax returns and impose additional tax, interest, and penalties, and the authorities could claim various withholding requirements apply to us or our subsidiaries or assert benefits of tax treaties are not available to us or our subsidiaries, any of which could have a material impact on us and the results of our operations. Our ability to use net operating losses to offset future taxable income may be subject to certain limitations. As of December 31, ~~2022~~ **2023** , we had gross U. S. federal and state net operating loss carryforwards, or NOLs, of $ ~~237~~ **295** . ~~7~~ **9** million and $ ~~256~~ **306** . ~~3~~ **8** million, respectively, available to offset future taxable income. NOLs generated in tax years ended on or prior to December 31, 2017 will substantially expire by 2037 if unused. As a result of certain provisions in the Tax Cuts and Jobs Act of 2017, or the TCJA, as modified by the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, federal NOLs generated in tax years beginning after December 31, 2017 may be carried forward indefinitely but, in the case of tax years beginning after 2020, may only be used to offset 80 % of our taxable income annually. Under the provisions of the Internal Revenue Code of 1986, as amended, or the Internal Revenue Code, substantial changes in our ownership may limit the amount of pre- change NOLs that can be utilized annually in the future to offset taxable income. Section 382 of the Internal Revenue Code imposes limitations on a company' s ability to use NOLs if a company experiences a more- than- 50- percent ownership change over a three- year testing period. Based upon our analysis as of December 31, ~~2022~~ **2023** , we have determined we do not expect these limitations to impair our ability to use our NOLs prior to expiration. However, if changes in our ownership occur in the future, our ability to use our NOLs may be further limited. For these reasons, we may not be able to utilize a material portion of the NOLs, even if we achieve profitability. As of December 31, ~~2022~~ **2023** , we also had gross foreign NOLs of $ ~~163~~ **192** . ~~4~~ **3** million, primarily at our Swiss subsidiary, Appian Software International. **As of December 31, 2023, we had tax- effected Swiss NOLs of $ 21. 8 million.** We **also** had ~~gross foreign~~ **tax- effected Swiss** NOL expirations of $ ~~8~~ **1** . 1 million in ~~2022~~ **2023** , and a piece of our foreign NOLs will continue to expire each year if unutilized. If we are limited in our ability to use our NOLs in future years in which we have taxable income, we will pay more taxes than if we were able to fully utilize our NOLs. This could adversely affect our operating results and the market price of our Class A common stock ~~.~~

~~Forecasting our estimated annual effective tax rate for financial accounting purposes is complex and subject to uncertainty, and there may be material differences between our forecasted and actual tax rates. Forecasts of our income tax position and effective tax rate for financial accounting purposes are complex and subject to uncertainty because our income tax position for each year combines the effects of a mix of profits earned and losses incurred by us in various tax jurisdictions with a broad range of income tax rates, as well as changes in the valuation of deferred tax assets and liabilities, the impact of various accounting rules and changes to these rules and tax laws, the results of examinations by various tax authorities, and the impact of any acquisition, business combination, or other reorganization or financing transaction. To forecast our global tax rate, we estimate our pre- tax profits and losses by jurisdiction and forecast our tax expense by jurisdiction. If the mix of profits and losses, our ability to use tax credits, or effective tax rates by jurisdiction is different than those estimated, our actual tax rate could be materially different than forecasted, which could have a material impact on our results of business, financial condition, and results of operations~~ . We are obligated to develop and maintain proper and effective internal controls over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our Class A common stock. We are required, pursuant to Section 404 of the Sarbanes- Oxley Act, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting on an annual basis. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. During the evaluation and testing process of our internal controls, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert our internal control over financial reporting is effective. While we have established certain procedures and controls over our financial reporting processes, we cannot provide assurance these efforts will prevent restatements of our financial statements in the future. Our independent registered public accounting firm is also required, pursuant to Section 404, to attest to and report on management ~~'~~ **’** s assessment of our internal control over financial reporting, which report is included elsewhere in this Annual Report on Form 10- K. This assessment is required to include disclosure of any material weaknesses identified by our management in our internal control over financial reporting. For future reporting periods, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed, or operating. We may not be able to remediate any future material weaknesses or to complete our evaluation, testing, and any required remediation in a timely fashion. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness in our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline, and we could be subject to sanctions or investigations by the Nasdaq ~~Stock~~ **Global** Market, the SEC, or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting or to implement or maintain other effective control systems required of public companies could also restrict our future access to the capital markets. Risks Related to Our Class A Common Stock The dual class structure of our common stock and the existing ownership of capital stock by Matt Calkins, our founder and Chief Executive Officer, has the effect of concentrating voting control with Mr. Calkins for the foreseeable future, which will limit the ability of others to influence corporate matters. Our Class B common stock has ten votes per share, and our Class A common stock has one vote per share. Given the greater number of votes per share attributed to our Class B common stock, our Class B stockholders collectively beneficially owned shares representing approximately 88 % of the voting power of our outstanding capital stock as of December 31, ~~2022~~ **2023** . Further, Mr. Calkins, our founder and Chief Executive Officer, together with his affiliates, collectively beneficially owned shares representing approximately 81 % of the voting power of our outstanding capital stock as of December 31, ~~2022~~ **2023** . Consequently, Mr. Calkins, together with his affiliates, is able to control a majority of the voting power even if their stock holdings represent as few as approximately 24 % of the outstanding number of shares of our common stock. This concentrated control will limit the ability of others to influence corporate matters for the foreseeable future. For example, Mr. Calkins will be able to control elections of directors, amendments of our certificate of incorporation or bylaws, increases to the number of shares available for issuance under our equity incentive plans or adoption of new equity incentive plans, and approval of any merger or sale of assets for the foreseeable future. This concentrated control could also discourage a potential investor from acquiring our Class A common stock due to the limited voting power of such stock relative to the Class B common stock and might harm the market price of our Class A common stock. In addition, Mr. Calkins has the ability to control the management and major strategic investments of our company as a result of his position as our Chief Executive Officer and his ability to control the election or replacement of our directors. As a board member and officer, Mr. Calkins owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. However, as a stockholder, even a controlling stockholder, Mr. Calkins is entitled to vote his shares, and shares over which he has voting control, in his own interests, which may not always be in the interests of our stockholders generally. Future transfers by Mr. Calkins and other holders of Class B common stock will generally result in those shares converting on a 1: 1 basis to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long- term. We do not intend to pay dividends on our common stock for the foreseeable future so any returns will depend on appreciation in the price of our Class A common stock. We have never declared or paid any cash dividends on our common stock, and we do not intend to pay any cash dividends in the foreseeable future. **We** ~~Although we paid a cash dividend in connection with the conversion of our Series A preferred stock to Class B common stock immediately prior to the closing of the IPO, which was agreed to at the time of the original issuance of the Series A preferred stock, we~~ anticipate we will retain all of our future earnings for use in the development of our business and for general corporate purposes. Additionally, our ability to pay dividends on our common stock is limited by restrictions under the terms of our ~~credit~~ **Credit** ~~agreement~~ **Agreement** ~~with Silicon Valley Bank~~ . Any determination to pay dividends in the future will be at the discretion of our Board of Directors. Accordingly, investors must rely on sales of their Class A common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments. Anti- takeover provisions in our charter documents and under Delaware law could make an acquisition of us more difficult, limit attempts by our stockholders to replace or remove our current management, and limit the market price of our Class A common stock. In addition to the effects of our dual class structure, provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our Board of Directors, which is responsible for appointing the members of our management. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which generally prohibit a Delaware corporation from engaging in any of a broad range of business combinations with any " interested " stockholder for a period of three years following the date on which the stockholder became an " interested " stockholder. Any of the foregoing provisions could limit the price investors might be willing to pay in the future for shares of our Class A common stock, and they could deter potential acquirers of our company, thereby reducing the likelihood a stockholder would receive a premium for its shares of our Class A common stock in an acquisition. Our amended and restated certificate of incorporation designates the Court of Chancery of the State of Delaware as the exclusive forum for certain litigation that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us and limit the market price of our Class A common stock. Pursuant to our amended and restated certificate of incorporation, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (3) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws, or (4) any action asserting a claim governed by the internal affairs doctrine. Our amended and restated certificate of incorporation also provides the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Our amended and restated certificate of incorporation further provides any person or entity purchasing or otherwise acquiring any interest in shares of our Class A common stock is deemed to have notice of and consented to the foregoing provisions. The forum selection clause in our amended and restated certificate of incorporation may limit our stockholders' ability to obtain a favorable judicial forum for disputes with us and limit the market price of our Class A common stock. General ~~risk~~ **Risk** ~~factors~~ **Factors** Unfavorable conditions in the global economy or the vertical markets we serve could limit our ability to grow our business and negatively affect our operating results. General worldwide economic conditions have experienced significant instability due to the global economic uncertainty and financial market conditions caused by the ~~COVID- 19 pandemic and the~~ ongoing Russia- Ukraine war **and unrest in the Middle East** . In addition, inflation rates ~~have~~ **in the** ~~recently~~ -- **recent** ~~risen~~ **past rose** to historically high levels. The existence of inflation in the U. S. and global economy has, and may continue to result in, higher interest rates and capital costs, increased costs of labor, fluctuating exchange rates, and other similar effects. These conditions make it extremely difficult for customers and us to accurately forecast and plan future business activities and could cause customers to reduce or delay their software spending. At this time, the potential impact on customer spend from an economic slowdown is difficult to predict and, therefore, it is not possible to fully determine the impact on our future results. Historically, economic downturns have resulted in overall reductions in software spending. If macroeconomic conditions deteriorate or are characterized by uncertainty or volatility, customers may curtail or freeze spending on software in general and for software such as ours specifically, which could have an adverse impact on our business, financial condition, and operating results. ~~We have historically generated a majority of our revenue from customers in the financial services, government, and life sciences verticals. While these verticals have not been affected as severely by weak economic conditions as the retail, hospitality, and entertainment industries, we cannot provide assurance these verticals will not suffer more severe losses in the future.~~ Furthermore, we cannot predict the timing, strength, or duration of any economic slowdown or recovery. In addition, even if the overall economy is robust, we cannot provide ~~assurance~~ **assurances that** the market for services such as ours will experience growth or that we will experience growth. Our stock price has been volatile and may be volatile in the future. The market price of our Class A common stock has been volatile and may continue to fluctuate substantially as a result of a variety of factors. Since shares of our Class A common stock were sold in our initial public offering, or IPO, in May 2017 at a price of $ 12. 00 per share, our stock price has ranged from an intraday low of $ 14. 60 to an intraday high of $ 260. 00 through February ~~13~~ **12** , ~~2023~~ **2024** . Factors that may affect the market price of our Class A common stock and our ability to raise capital through the sale of additional equity securities include: • Actual or anticipated fluctuations in our financial condition and operating results; • Variance in our financial performance from expectations of securities analysts; • Changes in the prices of subscriptions to our platform; • Changes in our projected operating and financial results; • Changes in laws or regulations applicable to our platform; • Announcements by us or our competitors of significant business developments, acquisitions, or new offerings; • Our involvement in any litigation; • Our sale of our Class A common stock or other securities in the future; • Changes in senior management or key personnel; • The trading volume of our Class A common stock; • Trading activity by any of our four large stockholders who collectively owned approximately ~~42~~ **37** % of our publicly traded Class A common stock as of December 31, ~~2022~~ **2023** ; • Changes in the anticipated future size and growth rate of our market; and • General economic, regulatory, and market conditions. The stock markets have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies, particularly during this time of uncertainty with increasing interest rates, inflation, and the prospects of a recession. These fluctuations have often been unrelated or disproportionate to the operating performance of those companies. Broad market and industry fluctuations, as well as general economic, political, regulatory, and market conditions, may negatively impact the market price of our Class A common stock. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation. We may be the target of this type of litigation in the future, which could result in substantial costs and divert our management' s attention. If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline. The trading market for our Class A common stock depends, in part, on the research and reports securities or industry analysts publish about us or our business. We do not have any control over these analysts. If our financial performance fails to meet analyst estimates or one or more of the analysts who cover us downgrade our shares or change their opinion of our shares, our share price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our share price or trading volume to decline.