Risk Factors Comparison 2024-01-31 to 2023-02-03 Form: 10-K

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Our operations and financial results are subject to various risks and uncertainties, including but not limited to those described below, which could harm our business, reputation, financial condition, and operating results, and affect the trading price of our Class A and Class C stock. Risks Specific to our Company We generate a significant portion of our revenues from advertising. Reduced spending by advertisers, a loss of partners, or new and existing technologies that block ads online and / or affect our ability to customize ads could harm our business. We generated more than ~~80~~ **75** % of total revenues from online advertising in ~~2022~~ **2023** . Many of our advertisers, companies that distribute our products and services, digital publishers, and content providers can terminate their contracts with us at any time. These partners may not continue to do business with us if we do not create more value ~~Alphabet Inc.~~ (such as increased numbers of users or customers, new sales leads, increased brand awareness, or more effective monetization) than their available alternatives. Changes to our advertising policies and data privacy practices **, such as our initiatives to phase out third- party cookies** , as well as changes to other companies' advertising and / or data privacy practices have in the past, and may in the future, affect the advertising that we are able to provide. In addition, technologies have been developed that make customized ads more difficult **,** or that block the display of ads altogether, and some providers of online services have integrated these technologies that could potentially impair the availability and functionality of third- party digital advertising. Failing to provide superior value or deliver advertisements effectively and competitively could harm our business, reputation, financial condition, and operating results. In addition, expenditures by advertisers tend to correlate with overall economic conditions. Adverse macroeconomic conditions have affected, and may in the future affect, the demand for advertising, resulting in fluctuations in the amounts our advertisers spend on advertising, which could harm our financial condition and operating results. We face intense competition. If we do not continue to innovate and provide products and services that are useful to users, customers, and other partners, we may not remain competitive, which could harm our business, financial condition, and operating results. Our business environment is rapidly evolving and intensely competitive. Our businesses face changing technologies, shifting user needs, and frequent introductions of rival products and services. To compete successfully, we must accurately anticipate technology developments and deliver innovative, relevant and useful products, services, and technologies in a timely manner. As our businesses evolve, the competitive pressure to innovate will encompass a wider range of products and services. We must continue to invest significant resources in **technical infrastructure and** R & D, including through acquisitions, in order to enhance our technology **,** ~~and new and existing~~ products **,** and services. We have many competitors in different industries. Our current and potential domestic and international competitors range from large and established companies to emerging start- ups. Some competitors have longer operating histories and well **-** established relationships in various sectors. They can use their experience and resources in ways that could affect our competitive position, including by making acquisitions ~~,~~ **and entering into other strategic arrangements;** continuing to invest heavily in **technical infrastructure,** R & D **,** and in talent ~~,~~ **;** initiating intellectual property and competition claims (whether or not meritorious) ~~,~~ **;** and continuing to compete for users, advertisers, customers, and content providers. Further, discrepancies in enforcement of existing laws may enable our lesser known competitors to aggressively interpret those laws without commensurate scrutiny, thereby affording them competitive advantages. Our competitors may also be able to innovate and provide products and services faster than we can or may foresee the need for products and services before **we do. We are expanding our investment in AI across the entire company. This includes generative AI and continuing to integrate AI capabilities into our products and services. AI technology and services are highly competitive, rapidly evolving, and require significant investment, including development and operational costs, to meet the changing needs and expectations of our existing users and attract new users. Our ability to deploy certain AI technologies critical for our products and services and for our business strategy may depend on the availability and pricing of third- party equipment and technical infrastructure. Additionally, other companies may develop AI products and technologies that are similar or superior to our technologies or more cost- effective to deploy. Other companies may also have (or in the future may obtain) patents or other proprietary rights that would prevent, limit, or interfere with our ability to make,** ~~us~~ **use , or sell our own AI products and services** . Our financial condition and operating results may also suffer if our products and services are not responsive to the evolving needs and desires of our users, advertisers, publishers, customers, and content providers. As new and existing technologies continue to develop, competitors and new entrants may be able to offer experiences that are, or **11. Alphabet Inc.** that are seen to be, substantially similar to or better than ours. These technologies could reduce usage of our products and services, and force us to compete in different ways and expend significant resources to develop and operate equal or better products and services. Competitors' success in providing compelling products and services or in attracting and retaining users, advertisers, publishers, customers, and content providers could harm our financial condition and operating results. Our ongoing investment in new businesses, products, services, and technologies is inherently risky, and could divert management attention and harm our business, financial condition, and operating results. We have invested and expect to continue to invest in new businesses, products, services, and technologies **in a wide range of industries beyond online advertising** . The investments that we are making across our businesses, such as ~~in~~ **building** AI **capabilities into new and existing products and services** , reflect our ongoing efforts to innovate and provide products and services that are ~~useful~~ **helpful** to users, advertisers, publishers, customers, and content providers. Our ~~investments span a wide range of industries beyond online advertising. Such~~ investments ultimately may not be commercially viable or may not result in an adequate return of capital and, in pursuing new strategies, we may incur unanticipated liabilities. **Innovations in our products and services could also result in changes to**

user behavior and affect our revenue trends. These endeavors ~~may~~ involve significant risks and uncertainties, including diversion of resources and management attention from current operations **, different monetization models,** and the use of alternative investment, governance, or compensation structures that may fail to adequately align incentives across the company or otherwise accomplish their objectives. Within Google Services, we continue to invest heavily in ~~hardware~~ **devices** , including our smartphones, home devices, and wearables, which is a highly competitive market with frequent introduction of new products and services, rapid adoption of technological advancements by competitors, **increased market saturation in developed countries,** short product life cycles, evolving industry standards, continual improvement in performance characteristics, and price and feature sensitivity on the part of consumers and businesses. There can be no assurance we will be able to provide ~~hardware~~ **devices** that ~~competes~~ **compete** effectively. Within Google Cloud, we devote significant resources to develop and deploy our enterprise- ready cloud services, including Google Cloud Platform and Google Workspace **, and we are advancing our AI platforms and models to support these tools and technologies** . We are incurring costs to build and maintain infrastructure to support cloud computing services, invest in cybersecurity, and hire talent, particularly to support and scale our sales force. At the same time, our competitors are rapidly developing and deploying cloud- based services. Pricing and delivery models are competitive and constantly evolving, and we may not attain sufficient scale and profitability to achieve our business objectives. Further, our business with public sector customers may present additional risks, including regulatory compliance risks. For instance, we may be subject to government audits and cost reviews, and any failure to comply or any deficiencies found may expose us to legal, financial, and / or reputational risks. Evolving laws and regulations may require us to make new capital investments, build new products, and seek partners to deliver localized services in other countries, and we may not be able to meet sovereign operating requirements. Within Other Bets, we are investing significantly in the areas of health, life sciences, and transportation, among others. These investment areas face intense competition from large, experienced, and well-funded competitors, and our offerings, many of which involve the development of new and emerging technologies, may not be successful, or be able to compete effectively or operate at sufficient levels of profitability. In addition, new and evolving products and services, including those that use AI, ~~require significant investment and~~ raise ethical, technological, legal, regulatory, and other challenges, which may negatively affect our brands and demand for our products and services. Because all of these investment areas are inherently risky, no assurance can be given that such strategies and offerings will be successful or will not harm our reputation, financial condition, and operating results. Our revenue growth rate could decline over time, and we ~~anticipate~~ **may experience** downward pressure on our operating margin in the future. Our revenue growth rate could decline over time as a result of a number of factors, including changes in the devices and modalities used to access our products and services; changes in geographic mix; deceleration or declines in advertiser spending; competition; customer usage and demand for our products; decreases in our pricing of our products and services; ongoing product and policy changes; and shifts to lower priced products and services. In addition, we may ~~also~~ experience downward pressure on our operating margin resulting from a variety of factors, such as **an increase in the mix of lower- margin products and services, in particular from** the continued expansion of our business into new fields, including products and services such as ~~hardware~~ **our devices** , Google Cloud, and **consumer** subscription products, as well as significant investments in Other Bets, all of which may have margins lower than those we generate from advertising. In particular, margins on our **devices** ~~hardware products~~ have had, and may continue to have, an adverse ~~affect~~ **effect** on our consolidated margins due to pressures on pricing and higher cost of sales. We may also experience **12.** downward pressure on our operating margins from increasing regulations, increasing competition, and increasing costs for many aspects of our business. Further, certain of our costs and expenses are generally less variable in nature and may not correlate to changes in revenue. ~~Additionally, in conjunction with~~ **We may also not be able to execute** our efforts to re-engineer **our** ~~costs~~ **cost base successfully or** ~~, we may not be able to execute these efforts~~ in a timely manner ~~or these efforts may not be successful~~ . Due to these factors and the evolving nature of our business, our historical revenue growth rate and historical operating margin may not be indicative of our future performance. For additional information, see Trends in Our Business and Financial Effect and Revenues and Monetization Metrics in Part II, Item 7 of this Annual Report on Form 10- K. Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services, and brands as well as affect our ability to compete. Our patents, trademarks, trade secrets, copyrights, and other intellectual property rights are important assets for us. Various events outside of our control pose a threat to our intellectual property rights, as well as to our products, services, and technologies. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed or made available through the Internet. Also, the efforts we have taken to protect our proprietary rights may not be sufficient or effective. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Moreover, we may not have adequate patent or copyright protection for certain innovations that later turn out to be important. There is always the possibility that the scope of the protection gained will be insufficient or that an issued patent may be deemed invalid or unenforceable. We also seek to maintain certain intellectual property as trade secrets. The secrecy of such trade secrets and other sensitive information could be compromised, which could cause us to lose the competitive advantage resulting from these trade secrets. We also face risks associated with our trademarks. For example, there is a risk that the word " Google " could become so commonly used that it becomes synonymous with the word " search. " Some courts have ruled that" Google" is a protectable trademark, but it is possible that other courts, particularly those outside of the U. S., may reach a different determination. If this happens, we could lose protection for this trademark, which could result in other people using the word " Google " to refer to their own products, thus diminishing our brand. Any significant impairment of our intellectual property rights could harm our business and our ability to compete. Also, protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our financial condition and operating results. Our business depends on strong brands, and failing to maintain and enhance our brands would hurt our ability to expand our base of users, advertisers, customers, content providers, and other partners. Our strong brands have significantly contributed to the success of our business. Maintaining and enhancing the brands within Google Services, Google Cloud, and Other Bets increases our ability to enter new categories and launch new and innovative products and services that better serve the needs of our users, advertisers, customers, content providers, and other partners. Our brands have been, and may in the future be, negatively affected by a number of factors, including, among others, reputational issues, third- party content shared on our platforms, data privacy and security issues and developments, and product or technical performance failures. For example, if we fail to respond appropriately to the sharing of misinformation or objectionable content on our services and / or products or objectionable practices by advertisers, or otherwise to adequately address user concerns, our users may lose confidence in our brands. Furthermore, failure to maintain and enhance our brands could harm our business, reputation, financial condition, and operating results. Our success will depend largely on our ability to remain a technology leader and continue to provide high- quality, trustworthy, innovative products and services that are truly useful and play a valuable role in a range of settings. We face a number of manufacturing and supply chain risks that could harm our business, financial condition, and operating results. We face a number of risks related to manufacturing and supply chain management, which could affect our ability to supply both our products and our services. We rely on contract manufacturers to manufacture or assemble our **devices** ~~hardware products~~ and servers and networking equipment used in our technical infrastructure, and we may supply the contract manufacturers with components to assemble the **devices** ~~hardware products~~ and equipment. We also rely on other companies to participate in the **supply of components and** distribution of our products and services. Our business could be negatively affected if we are not able to engage these companies with the necessary capabilities or capacity on reasonable terms, or if those we engage fail to meet their **13.** obligations (whether due to financial difficulties or other reasons), or make adverse changes in the pricing or other material terms of our arrangements with them. We have experienced and / or may in the future experience supply shortages, price increases **, quality issues** , and / or longer lead times that could negatively affect our operations, driven by raw material, component availability, manufacturing capacity, labor shortages, industry allocations, logistics capacity, inflation, foreign currency exchange rates, tariffs, sanctions and export controls, trade disputes and barriers **, forced labor concerns, sustainability sourcing requirements** , geopolitical tensions, armed conflicts, natural disasters or pandemics, the effects of climate change (such as sea level rise, drought, flooding, heat waves, wildfires and resultant air quality effects and power ~~shutoffs~~ **shutdowns** associated with wildfire prevention, and increased storm severity), power loss, and significant changes in the financial or business condition of our suppliers. ~~In addition, some~~ **Some** of the components we use in our technical infrastructure and our **devices** ~~hardware products~~ are available from only one or limited sources, and we may not be able to find replacement vendors on favorable terms in the event of a supply chain disruption. A significant supply interruption that affects us or our vendors could delay critical data center upgrades or expansions and delay consumer product availability. We may enter into long- term contracts for materials and products that commit us to significant terms and conditions. We may face costs for materials and products that are not consumed due to market demand, technological change, changed consumer preferences, quality, product recalls, and warranty issues. For instance, because certain of our hardware supply contracts have volume- based pricing or minimum purchase requirements, if the volume of ~~our hardware~~ sales **of our devices** decreases or does not reach projected targets, we could face increased materials and manufacturing costs or other financial liabilities that could make our products more costly per unit to manufacture and harm our financial condition and operating results. Furthermore, certain of our competitors may negotiate more favorable contractual terms based on volume and other commitments that may provide them with competitive advantages and may affect our supply. Our ~~products and services~~ **devices** have had, and in the future may have, quality issues resulting from design, manufacturing, or operations. Sometimes, these issues may be caused by components we purchase from other manufacturers or suppliers. If the quality of our products and services does not meet expectations or our products or services are defective **or require a recall** , it could harm our reputation, financial condition, and operating results. We require our suppliers and business partners to comply with laws and, where applicable, our company policies and practices, such as the Google Supplier Code of Conduct, regarding workplace and employment practices, data security, environmental compliance, and intellectual property licensing, but we do not control them or their practices. Violations of law or unethical business practices could result in supply chain disruptions, canceled orders, harm to key relationships, and damage to our reputation. Their failure to procure necessary license rights to intellectual property could affect our ability to sell our products or services and expose us to litigation or financial claims. Interruption to, interference with, or failure of our complex information technology and communications systems could hurt our ability to effectively provide our products and services, which could harm our reputation, financial condition, and operating results. The availability of our products and services and fulfillment of our customer contracts depend on the continuing operation of our information technology and communications systems. Our systems are vulnerable to damage, interference, or interruption from modifications or upgrades, terrorist attacks, state- sponsored attacks, natural disasters or pandemics, geopolitical tensions or armed conflicts **, export controls and sanctions** , the effects of climate change (such as sea level rise, drought, flooding, heat waves, wildfires and resultant air quality effects and power ~~shutoffs~~ **shutdowns** associated with wildfire prevention, and increased storm severity), power loss, **utility outages,** telecommunications failures, computer viruses, software bugs, ransomware **attacks, supply- chain** attacks, computer denial of service attacks, phishing schemes, or other attempts to harm or access our systems. Some of our data centers are located in areas with a high risk of major earthquakes or other natural disasters. Our data centers are also subject to break- ins, sabotage, and intentional acts of vandalism, and, in some cases, to potential disruptions resulting from problems experienced by facility operators or disruptions as a result of geopolitical tensions and conflicts happening in the area. Some of our systems are not fully redundant, and disaster recovery planning cannot account for all eventualities. The occurrence of a natural disaster or pandemic, closure of a facility, or other unanticipated problems affecting our data centers could result in lengthy interruptions in our service. In addition, our products and services are highly technical and complex and have contained in the past, and may contain in the future, errors or vulnerabilities, which could result in interruptions in or failure of our services or systems. Any of these incidents could impede or prevent us from effectively offering products and providing services, which could harm our reputation, financial condition, and operating results. Our international operations expose us to additional risks that could harm our business, financial condition, and operating results. **14.** Our international operations are significant to our revenues and net income, and we plan to continue to grow internationally. International revenues accounted for approximately ~~51~~ **53** % of our consolidated revenues in ~~2022~~ **2023** . In addition to risks described elsewhere in this section, our international operations expose us to other risks, including the following: • restrictions on foreign ownership and investments, and stringent foreign exchange controls that might prevent us from repatriating cash earned in countries outside the U. S.; • **sanctions,** import and export ~~requirements~~ **controls** , ~~tariffs, and~~ other market access barriers ~~that~~ **, political unrest, geopolitical tensions, changes in regimes, or armed conflict (such as ongoing conflicts in the Middle East and Ukraine), any of which** may **affect our business continuity, increase our operating costs, limit demand for our products and services, limit our ability to source components or final products, or** prevent or impede us from **operating in certain jurisdictions, complying with local laws, or** offering products or ~~providing~~ services ~~to a particular market, or that could limit our ability to source assemblies and finished products from a particular market, and may increase our operating costs~~ ; • longer payment cycles in some countries, increased credit risk, and higher levels of payment fraud; • an evolving foreign policy landscape that may adversely affect our revenues and could subject us to **litigation,** new regulatory costs and challenges (including new customer requirements), ~~in addition to~~ **uncertainty regarding regulatory outcomes, and** other **liabilities under** ~~adverse effects that we are unable to effectively anticipate; • sanctions, export controls, and trade restrictions that limit our ability to operate in certain jurisdictions or to comply with~~ local laws ~~, including as a result of geopolitical tensions or armed conflicts, such as the ongoing conflict in Ukraine; • political unrest, conflict, and changes in governmental regimes~~ that may **not offer due process** ~~adversely affect demand and usage of our~~ **or clear legal precedent** ~~products and services, may limit the ability for people in certain areas to access and use our products and services, or may impede us from offering products or providing services to a particular market~~ ; • anti- corruption laws, such as the U. S. Foreign Corrupt Practices Act, and other local laws prohibiting certain payments to government officials, violations of which could result in civil and criminal penalties; ~~• uncertainty regarding regulatory outcomes and other liabilities, including uncertainty as a result of local laws, insufficient due process, and lack of legal precedent;~~ and • different employee / employer relationships, existence of works councils and **differing** labor ~~unions~~ **practices** , and other challenges caused by distance, language, **local expertise,** and cultural differences, ~~making it harder to do~~ **increasing the complexity of doing** business in ~~certain~~ **multiple** jurisdictions. Because we conduct business in currencies other than U. S. dollars but report our financial results in U. S. dollars, we have faced, and will continue to face, exposure to fluctuations in foreign currency exchange rates. Although we hedge a portion of our international currency exposure, significant fluctuations in exchange rates between the U. S. dollar and foreign currencies **have in the past and** may **in the future** adversely affect our revenues and earnings. Hedging programs are also inherently risky and could expose us to additional risks that could harm our financial condition and operating results. We are exposed to fluctuations in the fair values of our investments and, in some instances, our financial statements incorporate **inherently subjective** valuation methodologies ~~that are subjective in nature resulting in fluctuations over time~~ . The fair value of our **debt and equity** investments may in the future be, and certain investments have been in the past, negatively affected by liquidity, credit deterioration or losses, performance and financial results of the underlying entities, foreign exchange rates, changes in interest rates, including changes that may result from the implementation of new benchmark rates, the effect of new or changing regulations, the stock market in general, or other factors. We measure certain of our non- marketable equity and debt securities, certain other instruments including stock- based compensation awards settled in the stock of ~~certain~~ Other ~~Bets~~ - **Bet companies** , and certain assets and liabilities acquired in a business combination, at fair value on a nonrecurring basis ~~. The determination of fair value involves use of appropriate valuation methods and certain unobservable inputs~~ , **which is inherently subjective and** requires management judgment and estimation ~~, and may change over time. We adjust the carrying value of our non- marketable equity securities to fair value for observable transactions of identical or similar investments of the same issuer or for impairments~~ . All gains and losses on non- marketable equity securities ~~,~~ are recognized in **OI & E** ~~other income (expense)~~ , which increases the volatility of our **OI & E** ~~other income (expense)~~ . The unrealized gains and losses **or impairments** we record from fair value remeasurements ~~of our non- marketable equity securities~~ in any particular period may differ significantly from the gains or losses we ultimately realize on such investments. As a result of these factors, the value of our investments could decline, which could harm our financial condition and operating results. Risks Related to our Industry People access ~~the Internet~~ **our products and services** through a variety of platforms and devices that continue to evolve with the advancement of technology and user preferences. If manufacturers and users do not widely adopt versions of our products and services developed for these interfaces, our business could be harmed. People access ~~the Internet~~ **our products and services** through a growing variety of devices such as desktop computers, mobile phones, smartphones, laptops and tablets, video game consoles, voice- activated speakers, wearables **(including virtual reality and augmented reality devices)** , automobiles, and television- streaming devices. Our products and services may be less popular on some interfaces. Each manufacturer or distributor may establish unique technical standards for its devices, and our products and services may not be available or may only be available with limited functionality for our users or our advertisers on these devices as a result. Some manufacturers may also elect not to include our products on their devices. In addition, search queries may be undertaken via voice- activated search, apps, **15.** social media or other platforms, which could harm our business. It is hard to predict the challenges we may encounter in adapting our products and services and developing competitive new products and services. We expect to continue to devote significant resources to creating and supporting products and services across multiple platforms and devices. Failing to attract and retain a substantial number of new device manufacturers, suppliers, distributors, developers, and users, or failing to develop products and technologies that work well on new devices and platforms, could harm our business, financial condition, and operating results and ability to capture future business opportunities. **Issues in the development and use of AI may result in reputational harm and increased liability exposure. Our evolving AI- related efforts may give rise to risks related to harmful content, inaccuracies, discrimination,**

intellectual property infringement or misappropriation, defamation, data privacy, cybersecurity, and other issues. As a result of these and other challenges associated with innovative technologies, our implementation of AI systems could subject us to competitive harm, regulatory action, legal liability (including under new and proposed legislation and regulations), new applications of existing data protection, privacy, intellectual property, and other laws, and brand or reputational harm. Some uses of AI will present ethical issues and may have broad effects on society. In order to implement AI responsibly and minimize unintended harmful effects, we have already devoted and will continue to invest significant resources to develop, test, and maintain our products and services, but we may not be able to identify or resolve all AI- related issues, deficiencies, and / or failures before they arise. Unintended consequences, uses, or customization of our AI tools and systems may negatively affect human rights, privacy, employment, or other social concerns, which may result in claims, lawsuits, brand or reputational harm, and increased regulatory scrutiny, any of which could harm our business, financial condition, and operating results. Data privacy and security concerns relating to our technology and our practices could harm our reputation, cause us to incur significant liability, and deter current and potential users or customers from using our products and services. Computer viruses, software bugs or defects, security breaches, and attacks on our systems could result in the improper disclosure and use of user data and interference with our users' and customers' ability to use our products and services, harming our business and reputation. Concerns about, including the adequacy of, our practices with regard to the collection, use, governance, disclosure, or security of personal data or other data- privacy- related matters, even if unfounded, could harm our business, reputation, financial condition, and operating results. Our policies and practices may change over time as expectations and regulations regarding privacy and data change. Our products and services involve the storage, handling, and transmission of proprietary and other sensitive information. Software bugs, theft, misuse, defects, vulnerabilities in our products and services, and security breaches expose us to a risk of loss or improper use and disclosure of such information, which could result in litigation and other potential liabilities, including regulatory fines and penalties, as well as reputational harm. Additionally, our products incorporate highly technical and complex technologies, and thus our technologies and software have contained, and are likely in the future to contain, undetected errors, bugs, and / or vulnerabilities **. We continue to add new features involving AI to our offerings and internal systems, and features that rely on AI may be susceptible to unanticipated security threats as our and the market' s understanding of AI- centric security risks and protection methods continue to develop** . We have in the past discovered, and may in the future discover, some errors in our software code only after we have released the code. Systems and control failures, security breaches, failure to comply with our privacy policies, and / or inadvertent disclosure of user data could result in government and legal exposure, seriously harm our reputation, brand, and business, and impair our ability to attract and retain users or customers. Such incidents have occurred in the past and may continue to occur due to the scale and nature of our products and services. While there is no guarantee that such incidents will not cause significant damage, we expect to continue to expend significant resources to maintain security protections that limit the effect of bugs, theft, misuse, and security vulnerabilities or breaches. We experience cyber attacks and other attempts to gain unauthorized access to our systems on a regular basis. Cyber attacks continue to evolve in sophistication and volume, and inherently may be difficult to detect for long periods of time. We have seen, and will continue to see, industry- wide software supply chain vulnerabilities, ~~such as the Log4j vulnerability reported in December 2021,~~ which could affect our or other parties' systems. We expect to continue to experience such incidents or vulnerabilities in the future. Our efforts to address undesirable activity on our platform may also increase the risk of retaliatory attack. In addition, we face the risk of cyber attacks by nation- states and state- sponsored actors. These attacks may target us or our customers, particularly our public sector customers (including federal, state, and local governments). Geopolitical tensions or armed conflicts, such as the ongoing conflict in **the Middle East and** Ukraine, may increase these risks. We may experience security issues, whether due to employee or insider error or malfeasance, system errors, or vulnerabilities in our or other parties' systems. While we may not determine some of these issues to be material at the **16.** time they occur and may remedy them quickly, there is no guarantee that these issues will not ultimately result in significant legal, financial, and reputational harm, including government inquiries, enforcement actions, litigation, and negative publicity. There is also no guarantee that a series of **related** issues may not be determined to be material at a later date in the aggregate, even if they may not be material individually at the time of their occurrence. Because the techniques used to obtain unauthorized access to, disable or degrade service provided by or otherwise sabotage systems change frequently and often are recognized only after being launched against a target, even taking all reasonable precautions, including those required by law, we have been unable in the past and may continue to be unable to anticipate or detect attacks or vulnerabilities or implement adequate preventative measures. Further, if any partners with whom we share user or other customer information fail to implement adequate data- security practices, fail to comply with our terms and policies, or otherwise suffer a network or other security breach, our users' data may be improperly accessed, used, or disclosed. If an actual or perceived breach of our or our business partners' or service providers' security occurs, the market perception of the effectiveness of our security measures would be harmed, we could lose users and customers, our trade secrets or those of our business partners may be compromised, and we may be exposed to significant legal and financial risks, including legal claims (which may include class- action litigation) and regulatory actions, fines, and penalties. Any of the foregoing consequences could harm our business, reputation, financial condition, and operating results. While we have dedicated significant resources to privacy and security incident response capabilities, including dedicated worldwide incident response teams, our response process, particularly during times of a natural disaster or pandemic, may not be adequate, may fail to accurately assess the severity of an incident, may not be fast enough to prevent or limit harm, or may fail to sufficiently remediate an incident. As a result, we may suffer significant legal, reputational, or financial exposure, which could harm our business, financial condition, and operating results. For additional information, see also our risk factor on privacy and data protection regulations under ' Risks Related to Laws, Regulations, and Policies' below. Our ongoing investments in safety, security, and content review will likely continue to identify abuse of our platforms and misuse of user data. In addition to our efforts to prevent and mitigate cyber attacks, we are making significant investments in safety, security, and review efforts to combat misuse of our services and unauthorized access to user data by third parties, including investigation and review of platform applications that could access the information of users of our services. As a result of these efforts, we have in the past discovered, and may in the future discover, incidents of unnecessary access to or misuse of user data or other undesirable activity by third parties. However, we may not have discovered, and may in the future not discover, all such incidents or activity, whether as a result of our data limitations, including our lack of visibility over our encrypted services, the scale of activity on our platform, or other factors, including factors outside of our control such as a natural disaster or pandemic, and we may learn of such incidents or activity via third parties. Such incidents and activities may include the use of user data or our systems in a manner inconsistent with our terms, contracts or policies, the existence of false or undesirable user accounts, election interference, improper ad purchases, activities that threaten people' s safety on- or off- line, or instances of spamming, scraping, or spreading disinformation. While we may not determine some of these incidents to be material at the time they occurred and we may remedy them quickly, there is no guarantee that these issues will not ultimately result in significant legal, financial, and reputational harm, including government inquiries and enforcement actions, litigation, and negative publicity. There is also no guarantee that a series of **related** issues may not be determined to be material at a later date in the aggregate, even if they may not be material individually at the time of their occurrence. We may also be unsuccessful in our efforts to enforce our policies or otherwise prevent or remediate any such incidents. Any of the foregoing developments may negatively affect user trust and engagement, harm our reputation and brands, require us to change our business practices in ways that harm our business operations, and adversely affect our business and financial results. Any such developments may also subject us to additional litigation and regulatory inquiries, which could result in monetary penalties and damages, divert management' s time and attention, and lead to enhanced regulatory oversight. Problematic content on our platforms, including low- quality user- generated content, web spam, content farms, and other violations of our guidelines could affect the quality of our services, which could harm our reputation and deter our current and potential users from using our products and services. We, like others in the industry, face violations of our content guidelines across our platforms, including sophisticated attempts by bad actors to manipulate our hosting and advertising systems to fraudulently generate revenues, or to otherwise generate traffic that does not represent genuine user interest or intent. While we invest significantly in efforts to promote high- quality and relevant results and to detect and prevent low- quality content and invalid traffic, we have been unable and may continue to be unable to detect and prevent all such abuses or promote **17.** uniformly high- quality content **. Increased use of AI in our offerings and internal systems may create new avenues of abuse for bad actors** . Many websites violate or attempt to violate our guidelines, including by seeking to inappropriately rank higher in search results than our search engine' s assessment of their relevance and utility would rank them. Such efforts have affected, and may continue to affect, the quality of content on our platforms and lead them to display false, misleading, or undesirable content. Although English- language web spam in our search results has been reduced, and web spam in most other languages is limited, we expect web spammers will continue to seek inappropriate ways to improve their rankings. ~~We continuously combat web spam in our search results, including through~~ - **Although** ~~indexing technology that makes it harder for spam- like, less useful web~~ - **we** ~~content to rank highly. We also~~ continue to invest in and deploy proprietary technology to detect and prevent web spam on **our platforms, there is no guarantee that our technology will always be successful, and our users may have negative experiences on our platforms if our technology fails to work as intended, which may affect our users' decisions in continuing to use** our platforms. We also face other challenges from low- quality and irrelevant content websites, including content farms, which are websites that generate large quantities of low- quality content to help them improve their search rankings. We are continually launching algorithmic changes designed to detect and prevent abuse from low- quality websites **, but we may not always be successful** . We also face other challenges on our platforms, including violations of our content guidelines involving incidents such as attempted election interference, activities that threaten the safety and / or well- being of our users on- or off- line, and the spreading of misinformation or disinformation. If we fail to either detect and prevent an increase in problematic content or effectively promote high- quality content, it could hurt our reputation for delivering relevant information or reduce use of our platforms, harming our financial condition and operating results. It may also subject us to litigation and regulatory actions, which could result in monetary penalties and damages and divert management' s time and attention. Our business depends on continued and unimpeded access to the Internet by us and our users. Internet access providers may be able to restrict, block, degrade, or charge for access to certain of our products and services, which could lead to additional expenses and the loss of users and advertisers. Our products and services depend on the ability of our users to access the Internet, and certain of our products require significant bandwidth to work effectively. Currently, this access is provided by companies that have significant market power in the broadband and internet access marketplace, including incumbent telephone companies, cable companies, mobile communications companies, and government- owned service providers. Some of these providers have taken, or have stated that they may take, measures that could degrade, disrupt, or increase the cost of user access to certain of our products by restricting or prohibiting the use of their infrastructure to support or facilitate our offerings, by charging increased fees to us or our users to provide our offerings, or by providing our competitors preferential access. Some jurisdictions have adopted regulations prohibiting certain forms of discrimination by internet access providers; however, substantial uncertainty exists in the U. S. and elsewhere regarding such protections. For example, in 2018 the U. S. Federal Communications Commission repealed net neutrality rules, which could permit internet access providers to restrict, block, degrade, or charge for access to certain of our products and services. In addition, in some jurisdictions, our products and services have been subject to government- initiated restrictions or blockages. These could harm existing key relationships, including with our users, customers, advertisers, and / or content providers, and impair our ability to attract new ones; harm our reputation; and increase costs, thereby negatively affecting our business. We are subject to a variety of new, existing, and changing laws and regulations worldwide that could harm our business, and will likely be subject to an even broader scope of laws and regulations as we continue to expand our business. We are subject to numerous

U. S. and foreign laws and regulations covering a wide variety of subjects, and our introduction of new businesses, products, services, and technologies will likely continue to subject us to additional laws and regulations. In recent years, governments around the world have proposed and adopted a large number of new laws and regulations relevant to the digital economy, particularly in the areas of data privacy and security, competition, **environmental, social and governance (ESG) requirements, AI,** and online content. The costs of compliance with these measures are high and are likely to increase in the future. New or changing laws and regulations, or new interpretations or applications of existing laws and regulations in a manner inconsistent with our practices, have resulted in, and may continue to result in, less useful products and services, altered business practices, limited ability to pursue certain business models or offer certain products and services, substantial costs, and civil or criminal liability. Examples include laws and regulations regarding: • Competition and technology platforms' business practices: Laws and regulations focused on large technology platforms, including the Digital Markets Act in the European Union (EU); regulations **and legal 18. settlements** in **the U. S.,** South Korea **,** and elsewhere that affect Google Play' s billing policies, fees, and business model; as well as **litigation and new** regulations under consideration in a range of jurisdictions **. • AI: Laws and regulations focused on the development, use, and provision of AI technologies and other digital products and services, which could result in monetary penalties or other regulatory actions. For example, while legislative text has yet to be finalized and formally approved, provisional political agreement on a proposed EU AI Act was reached between co-legislators in December 2023, including that specific transparency and other requirements would be introduced for general purpose AI systems and the models on which those systems are based. In addition, the White House' s Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence devises a framework for the U. S. government, among other things, to regulate private sector use and development of certain foundation models** . • Data privacy, collection, and processing: Laws and regulations further restricting the collection, processing, and / or sharing of user or advertising- related data, including privacy and data protection laws ~~,~~ **;** laws affecting the processing of children' s data (as discussed further below), data breach notification laws, and laws limiting data transfers (including data localization laws). • Copyright and other intellectual property: Copyright and related laws, including the EU Directive on Copyright in the Digital Single Market and European Economic Area transpositions, which may introduce new licensing regimes, increase liability with respect to content uploaded by users or linked to from our platforms, or create property rights in news publications that could require payments to news agencies and publishers **, which may result in other regulatory actions** . • Content moderation: Various laws covering content moderation and removal, and related disclosure obligations, such as the EU' s Digital Services Act, Florida' s Senate Bill 7072 and Texas' House Bill 20, and laws and proposed legislation in Singapore, Australia, and the United Kingdom that impose penalties for failure to remove certain types of content or require disclosure of information about the operation of our services and algorithms, which may make it harder for services like Google Search and YouTube to detect and deal with low- quality, deceptive, or harmful content. • Consumer protection: Consumer protection laws, including the EU' s New Deal for Consumers, which could result in monetary penalties and create a range of new compliance obligations. In addition, the applicability and scope of these and other laws and regulations, as interpreted by ~~the~~ courts **, regulators, or administrative bodies** , remain uncertain and could be interpreted in ways that harm our business. For example, we rely on statutory safe harbors, like those set forth in the Digital Millennium Copyright Act and Section 230 of the Communications Decency Act in the U. S. and the E- Commerce Directive in Europe, to protect against liability for various linking, caching, ranking, recommending, and hosting activities. Legislation or court rulings affecting these safe harbors may adversely affect us and may impose significant operational challenges. There are legislative proposals and pending litigation in the U. S. ~~(such as Gonzalez v. Google)~~ , EU, and around the world that could diminish or eliminate safe harbor protection for websites and online platforms. **Our development, use, and commercialization of AI products and services (including our implementation of AI in our offerings and internal systems) could subject us to regulatory action and legal liability, including under specific legislation regulating AI, as well as new applications of existing data protection, cybersecurity, privacy, intellectual property, and other laws.** We are and may continue to be subject to claims, lawsuits, regulatory and government investigations, enforcement actions, consent orders, and other forms of regulatory scrutiny and legal liability that could harm our business, reputation, financial condition, and operating results. We are subject to claims, lawsuits, regulatory and government investigations, other proceedings, and ~~consent~~ orders involving competition, intellectual property, data privacy and security, tax and related compliance, labor and employment, commercial disputes, content generated by our users, goods and services offered by advertisers or publishers using our platforms, personal injury, and other matters. We **are** also ~~are~~ subject to a variety of claims including product warranty, product liability, and consumer protection claims related to product defects, among other litigation, and we may also be subject to claims involving health and safety, hazardous materials usage, other environmental effects **, AI training, development, and commercialization** , or service disruptions or failures. Claims have been brought, and we expect will continue to be brought, against us for defamation, negligence, breaches of contract, copyright and trademark infringement, unfair competition, unlawful activity, torts, privacy rights violations, fraud, or other legal theories based on the nature and content of information available on or via our services **, the design and effect of our products and services,** or due to our involvement in hosting, transmitting, marketing, branding, or providing access to content created by third parties. **19.** For example **, in December 2023, a California jury delivered a verdict in Epic Games v. Google finding that Google violated antitrust laws related to Google Play' s billing practices. The presiding judge will determine remedies in 2024 and the range of potential remedies vary widely. We plan to appeal. In addition** , the U. S. Department of Justice, various U. S. states, and other plaintiffs have filed several antitrust lawsuits about various aspects of our business, including our advertising technologies and practices, the operation and distribution of Google Search, and the operation and distribution of the Android operating system and Play Store. Other regulatory agencies in the U. S. and around the world, including competition enforcers, consumer protection agencies, and data protection authorities, have challenged and may continue to challenge our business practices and compliance with laws and regulations. We are cooperating with these investigations and defending litigation **or**

appealing decisions where appropriate. Various laws, regulations, investigations, enforcement lawsuits, and regulatory actions have **involved** in the past, and may in the future result in substantial fines and penalties, injunctive relief, ongoing monitoring and auditing obligations, changes to our products and services, alterations to our business models and operations **, including divestiture** , and collateral related civil litigation or other adverse consequences, all of which could harm our business, reputation, financial condition, and operating results. Any of these legal proceedings could result in legal costs, diversion of management resources, negative publicity and other harms to our business. Estimating liabilities for our pending ~~litigation~~ **proceedings** is a complex, fact- ~~intensive~~ **specific, and speculative** process that requires significant judgment, and the amounts we are ultimately liable for may **be less than or** exceed our estimates. The resolution of one or more such proceedings has resulted in, and may in the future result in, additional substantial fines, penalties, injunctions, and other sanctions that could harm our business, reputation, financial condition, and operating results **. For additional information about the ongoing material legal proceedings to which we are subject, see Legal Proceedings in Part I, Item 3 of this Annual Report on Form 10- K** . Privacy, data protection, and data usage regulations are complex and rapidly evolving areas. Any failure or alleged failure to comply with these laws could harm our business, reputation, financial condition, and operating results. Authorities around the world have adopted and are considering a number of legislative and regulatory proposals concerning data protection, data usage, and encryption of user data. Adverse legal rulings, legislation, or regulation have resulted in, and may continue to result in, fines and orders requiring that we change our practices, which have had and could continue to have an adverse effect on how we provide services, harming our business, reputation, financial condition, and operating results. These laws and regulations are evolving and subject to interpretation, and compliance obligations could cause us to incur substantial costs or harm the quality and operations of our products and services in ways that harm our business. Examples of these laws include: • The General Data Protection Regulation and the United Kingdom General Data Protection Regulations, which apply to all of our activities conducted from an establishment in the EU or the United Kingdom, respectively, or related to products and services that we offer to EU or the United Kingdom users or customers, respectively, or the monitoring of their behavior in the EU or the UK, respectively. • Various **comprehensive U. S.** state and foreign privacy laws ~~and regulations~~ , ~~such as the California Consumer Privacy Act of 2018, the California Privacy Rights Act, the Virginia Consumer Data Protection Act, the Colorado Privacy Act, the Connecticut Data Privacy Act, and the Utah Consumer Privacy Act, all of~~ which give new data privacy rights to their respective residents (including, in California, a private right of action in the event of a data breach resulting from our failure to implement and maintain reasonable security procedures and practices) and impose significant obligations on controllers and processors of consumer data. • State laws governing the processing of biometric information, such as the Illinois Biometric Information Privacy Act and the Texas Capture or Use of Biometric Identifier Act, which impose obligations on businesses that collect or disclose consumer biometric information. • Various federal, state, and foreign laws governing how companies provide age appropriate experiences to children and minors, including the collection and processing of children and minor' s data. These include the Children' s Online Privacy Protection Act of 1998, **and** the United Kingdom Age- ~~Appropriate Design Code, and the California Age-~~ Appropriate Design Code, all of which address the use and disclosure of the personal data of children and minors and impose obligations on online services or products directed to or likely to be accessed by children. • The California Internet of Things Security Law, which regulates the security of data used in connection with internet- connected devices. • The EU' s Digital Markets Act, which will require in- scope companies to obtain user consent for combining data across certain products and require search engines to share anonymized data with rival companies, among other changes. **20.** Further, we are subject to evolving laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and / or receive personal data ~~. Previously available transfer mechanisms~~ , ~~such~~ as ~~the EU~~ **well as ongoing enforcement actions from supervisory authorities related to cross** - **border transfers of personal** ~~U. S. and the Swiss- U. S. Privacy Shield frameworks, were invalidated in 2020, and other bases for~~ data ~~transfer and storage, such as Standard Contractual Clauses, remain subject to ongoing review in ways that may require us to adapt our existing contractual arrangements~~ . The validity of various data transfer mechanisms **we currently rely upon** remains subject to legal, regulatory, and political developments in both Europe and the U. S., **which may require** ~~including the potential adoption of the U. S.- EU Data Privacy Framework. Until the U. S.- EU Data Privacy Framework is adopted by the EU, the legal uncertainty and ongoing enforcement action from supervisory authorities related to cross- border transfers of personal data, could harm our ability to process and transfer personal data outside of the European Economic Area and could in turn harm our ability to provide, and our customers' ability to use~~ - **us to adapt** ~~, some of~~ our **existing arrangements** ~~products and services~~ . We face, and may continue to face, intellectual property and other claims that could be costly to defend, result in significant damage awards or other costs (including indemnification awards), and limit our ability to use certain technologies. We, like other internet, technology, and media companies, are frequently subject to litigation based on allegations of infringement or other violations of intellectual property rights, including patent, copyright, trade secrets, and trademarks. Parties have also sought broad injunctive relief against us by filing claims in U. S. and international courts and the U. S. International Trade Commission (ITC) for exclusion and cease- and- desist orders. In addition, patent- holding companies may frequently seek to generate income from patents they have obtained by bringing claims against us. As we continue to expand our business, the number of intellectual property claims against us has increased and may continue to increase as we develop and acquire new products, services, and technologies. Adverse results in any of these lawsuits may include awards of monetary damages, costly royalty or licensing agreements (if licenses are available at all), or orders limiting our ability to sell our products and services in the U. S. or elsewhere, including by preventing us from offering certain features, functionalities, products, or services in certain jurisdictions. They may also cause us to change our business practices in ways that could result in a loss of revenues for us and otherwise harm our business. Many of our agreements with our customers and partners, including certain suppliers, require us to defend against certain intellectual property infringement claims and in some cases indemnify them for certain intellectual property infringement claims against them, which could result in increased costs for defending such claims or significant damages if there were an adverse ruling in any such claims. Such customers and partners may also discontinue the use of our products, services, and technologies, as a result of injunctions or otherwise, which could result in loss of revenues and harm our business. Moreover, intellectual property indemnities provided to us by our suppliers, when obtainable, may not cover all damages and losses suffered by us and our customers arising from intellectual property infringement claims. Furthermore, in connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, including those associated with intellectual property claims. Regardless of their merits, intellectual property claims are often time consuming and expensive to litigate or settle. To the extent such claims are successful, they could harm our business, including our product and service offerings, financial condition, and operating results. Expectations relating to ~~environmental, social, and governance (~~ESG ~~)~~ considerations could expose us to potential liabilities, increased costs, and reputational harm. We are subject to laws, regulations, and other measures that govern a wide range of topics, including those related to matters beyond our core products and services. For instance, new laws, regulations, policies, and international accords relating to ESG matters, including sustainability, climate change, human capital, and diversity, are being developed and formalized in Europe, the U. S., and elsewhere, which may entail specific, target- driven frameworks and / or disclosure requirements. We have implemented robust ESG programs, adopted reporting frameworks and principles, and announced a number of goals and initiatives. The implementation of these goals and initiatives may require considerable investments, and our goals, with all of their contingencies, dependencies, and in certain cases, reliance on third- party verification and / or performance, are complex and ambitious, **and** may change **. We** ~~, and we~~ cannot guarantee that **our goals and initiatives will be fully realized on the timelines** we ~~will~~ **expect or at all, and projects that are completed as planned may not** achieve ~~them~~ - **the results we anticipate** . Any failure, or perceived failure, by us to adhere to our public statements, comply fully with developing interpretations of ESG laws and regulations, or meet evolving and varied stakeholder expectations and standards could harm our business, reputation, financial condition, and operating results. We could be subject to changes in tax rates, the adoption of new U. S. or international tax legislation, or exposure to additional tax liabilities. We are subject to a variety of taxes and tax collection obligations in the U. S. and numerous foreign jurisdictions. Our effective tax rates are affected by a variety of factors, including changes in the mix of earnings in jurisdictions with different statutory tax rates, net gains and losses on hedges and related transactions under our foreign exchange risk management program, ~~decreases~~ **changes** in our stock price for shares issued as employee compensation, changes in the valuation of our deferred tax assets or liabilities, and the application of different provisions of tax laws or changes in tax laws, regulations, or accounting principles (including changes in the interpretation of existing laws). Further, if we are **21.** unable or fail to collect taxes on behalf of customers, employees and partners as the withholding agent, we could become liable for taxes that are levied against third parties. We are subject to regular review and audit by both domestic and foreign tax authorities. As a result, we have received, and may in the future receive, assessments in multiple jurisdictions, on various tax- related assertions, such as transfer- pricing adjustments or permanent- establishment claims. Any adverse outcome of such a review or audit could harm our financial condition and operating results, require adverse changes to our business practices, or subject us to additional litigation and regulatory inquiries. In addition, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment and often involves uncertainty. Although we believe our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our financial statements and may affect our financial results in the period or periods for which such determination is made. Furthermore, due to shifting economic and political conditions, tax policies, laws, or rates in various jurisdictions may be subject to significant changes in ways that could harm our financial condition and operating results. **For example,** ~~Various~~ **various** jurisdictions around the world have enacted or are considering revenue- based taxes such as digital services taxes and other targeted taxes, which could lead to inconsistent and potentially overlapping international tax regimes. The Organization for Economic Cooperation and Development **(OECD) is coordinating negotiations among more than 140** ~~continues~~ -- **countries with the goal of achieving consensus around substantial changes** to ~~advance proposals for modernizing~~ international tax ~~rules~~ **policies, including the implementation of a minimum global effective tax rate of 15 %. Our effective tax rate and cash tax payments could increase in future years as a result of these changes** . Risks Related to Ownership of our Stock We cannot guarantee that any share repurchase program will be fully consummated or will enhance long- term stockholder value, and share repurchases could increase the volatility of our stock prices and could diminish our cash reserves. We engage in share repurchases of our Class A and Class C stock from time to time in accordance with authorizations from the Board of Directors of Alphabet. Our repurchase program does not have an expiration date and does not obligate Alphabet to repurchase any specific dollar amount or to acquire any specific number of shares. Further, our share repurchases could affect our share trading prices, increase their volatility, reduce our cash reserves and may be suspended or terminated at any time, which may result in a decrease in the trading prices of our stock. The concentration of our stock ownership limits our stockholders' ability to influence corporate matters. Our Class B stock has 10 votes per share, our Class A stock has one vote per share, and our Class C stock has no voting rights. As of December 31, ~~2022~~ **2023** , Larry Page and Sergey Brin beneficially owned approximately ~~85~~ **86** . ~~8~~ **5** % of our outstanding Class B stock, which represented approximately 51. ~~2~~ **5** % of the voting power of our outstanding common stock. Through their stock ownership, Larry and Sergey have significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets, for the foreseeable future. In addition, because our Class C stock carries no voting rights (except as required by applicable law), the issuance of the Class C stock, including in future stock- based acquisition transactions and to fund employee equity incentive programs, could continue Larry and Sergey' s current relative voting power and their ability to elect all of our directors and to determine the outcome of most matters submitted to a vote of our stockholders. The share repurchases made pursuant to our repurchase program may also affect Larry and Sergey' s relative voting power. This concentrated control limits or severely restricts other stockholders' ability to influence corporate matters and we may take actions that some of our stockholders do not view as beneficial, which could reduce the market price of our Class A stock and our Class C stock. Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable. Provisions in Alphabet' s certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following: • Our Board of Directors has the right to elect directors to fill a vacancy created by the expansion of the Board of Directors or the resignation, death, or removal of a director. • Our stockholders may not act by written consent, which makes it difficult to take certain actions without holding a stockholders' meeting. • Our certificate of incorporation prohibits cumulative voting in the election of directors. This limits the ability of minority stockholders to elect director candidates. **22.** • Stockholders must provide advance notice to nominate individuals for election to the Board of Directors or to propose matters that can be acted upon at a stockholders' meeting. These provisions may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer' s own slate of directors or otherwise attempting to obtain control of our company. • Our Board of Directors may issue, without stockholder approval, shares of undesignated preferred stock, which makes it possible for our Board of Directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us. As a Delaware corporation, we are also subject to certain Delaware anti- takeover provisions. Under Delaware law, a corporation may not engage in a business combination with any holder of 15 % or more of its outstanding voting stock unless the holder has held the stock for three years or, among other things, the Board of Directors has approved the transaction. Our Board of Directors could rely on Delaware law to prevent or delay an acquisition of us. The trading price for our Class A stock and non- voting Class C stock may continue to be volatile. The trading price of our stock has at times experienced significant volatility and may continue to be volatile. In addition to the factors discussed in this report, the trading prices of our Class A stock and Class C stock have fluctuated, and may continue to fluctuate widely, in response to various factors, many of which are beyond our control, including, among others, the activities of our peers and changes in broader economic and political conditions around the world. These broad market and industry factors could harm the market price of our Class A stock and our Class C stock, regardless of our actual operating performance. General Risks ~~The continuing effects of the COVID- 19 pandemic and its impact are highly unpredictable and could be significant, and could harm our business, financial condition, and operating results. Our business, operations and financial performance have been, and may continue to be, affected by the macroeconomic impacts resulting from COVID- 19, and as a result, our revenue growth rate and expenses as a percentage of our revenues in future periods may differ significantly from our historical rates, and our future operating results may fall below expectations. The extent to which our business will continue to be affected will depend on a variety of factors, many of which are outside of our control, including the persistence of the pandemic, impacts on economic activity, and the possibility of recession or continued financial market instability.~~ Our operating results may fluctuate, which makes our results difficult to predict and could cause our results to fall short of expectations. Our operating results have fluctuated, and may in the future fluctuate, as a result of a number of factors, many outside of our control, including the ~~cyclicality~~ --- **cyclical nature** and seasonality in our business and geopolitical events. As a result, comparing our operating results (including our expenses as a percentage of our revenues) on a period- to- period basis may not be meaningful, and our past results should not be relied on as an indication of our future performance. Consequently, our operating results in future quarters may fall below expectations. Acquisitions, joint ventures, investments, and divestitures could result in operating difficulties, dilution, and other consequences that could harm our business, financial condition, and operating results. Acquisitions, joint ventures, investments, and divestitures are important elements of our overall corporate strategy and use of capital, and these transactions could be material to our financial condition and operating results. We expect to continue to evaluate and enter into discussions regarding a wide array of such potential strategic ~~transactions~~ **arrangements** , which could create unforeseen operating difficulties and expenditures. Some of the areas where we face risks include: • diversion of management time and focus from operating our business to challenges related to acquisitions and other strategic ~~transactions~~ **arrangements** ; • failure to obtain required approvals on a timely basis, if at all, from governmental authorities, or conditions placed upon approval that could, among other things, delay or prevent us from completing a transaction, or otherwise restrict our ability to realize the expected financial or strategic goals of a transaction; • failure to successfully integrate the acquired operations, technologies, services, and personnel (including cultural integration and retention of employees) and further develop the acquired business or technology; • implementation **of controls (** or remediation of ~~controls~~ - **control deficiencies)** , procedures, and policies at the acquired company; • integration of the acquired company' s accounting and other administrative systems, and the coordination of product, engineering, and sales and marketing functions; • transition of operations, users, and customers onto our existing platforms; • in the case of foreign acquisitions, the need to integrate operations across different cultures and languages and to address the particular economic, currency, political, and regulatory risks associated with specific countries; • failure to accomplish commercial, strategic or financial objectives with respect to investments ~~and~~ **,** joint ventures **, and other strategic arrangements** ; • failure to realize the value of investments and joint ventures due to a lack of liquidity; • liability for activities of the acquired company before the acquisition, including patent and trademark infringement claims, data privacy and security issues, violations of laws, commercial disputes, tax liabilities, warranty claims, product liabilities, and other known and unknown liabilities; and • litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders, or other third parties. Our failure to address these risks or other problems encountered in connection with our past or future acquisitions and other strategic ~~transactions~~ **arrangements** could cause us to fail to realize their anticipated benefits, incur unanticipated liabilities, and harm our business generally. Our acquisitions and other strategic ~~transactions~~ **arrangements** could also result in dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses, or impairment of goodwill and / or purchased long- lived assets, and restructuring charges, any of which could harm our financial condition and operating results. Also, the anticipated benefits or value of our acquisitions and other strategic ~~transactions~~ **arrangements** may not materialize. In connection with our divestitures, we have agreed, and may in the future agree, to provide indemnification for certain potential liabilities, which could harm our financial condition and operating results. ~~If~~ **We rely on highly skilled personnel and, if** we ~~were~~ **are unable** to

retain or motivate ~~lose the services of~~ key personnel **, hire qualified personnel, or maintain and continue to adapt our corporate culture** , we may not be able to ~~execute~~ **grow** ~~our~~ - **or** ~~business strategy~~ **operate effectively** . Our **performance and** future success depends in large part upon the continued service of key **technical leads as well as** members of our senior management team. For instance, Sundar Pichai is critical to the overall management of Alphabet and its subsidiaries and plays an important role in the development of our technology, maintaining our culture, and setting our strategic direction **.** Our ability to compete effectively and our future success ~~depends~~ - **depend** on our continuing to identify,hire,develop,motivate,and retain highly skilled personnel for all areas of our organization.Competition in our industry for qualified employees is intense,and certain of our competitors have directly targeted,and may continue to target,our employees.In addition,our compensation arrangements,such as our equity award programs,may not always be successful in attracting new employees and retaining and motivating our existing employees.Restrictive immigration policy and regulatory changes may also affect our ability to hire,mobilize,or retain some of our global talent ~~.~~. All of our executive officers and key employees are at- will employees, and we do not maintain any key- person life insurance policies. The loss of key personnel could harm...... retain some of our global talent. In addition, we believe that our corporate culture fosters innovation, creativity, and teamwork. As our organization grows and evolves, we may need to ~~implement more complex organizational management structures or~~ adapt our corporate culture and work environments to ever- changing circumstances, such as during times of a natural disaster or pandemic, and these changes could affect our ability to compete effectively or have an adverse effect on our corporate culture. **Under our** ~~As we experiment with~~ hybrid work models, we may experience increased costs and / or disruption, in addition to potential effects on our ability to operate effectively and maintain our corporate culture.