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

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Fiscal Year Ended June 30, 2022

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the Transition Period From to

Commission File Number 001-37845

MICROSOFT CORPORATION

WASHINGTON
(STATE OF INCORPORATION)

91-1144442
(I.R.S. ID)

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Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol	Name of exchange on which registered
Common stock, \$0.00000625 par value per share	MSFT	NASDAQ
3.125% Notes due 2028	MSFT	NASDAQ
2.625% Notes due 2033	MSFT	NASDAQ

Securities registered pursuant to Section 12(g) of the Act:

NONE

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☒

Accelerated Filer ☐

Non-accelerated Filer ☐

Smaller Reporting Company ☐

Emerging Growth Company ☐

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

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

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

As of December 31, 2021, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$2.5 trillion based on the closing sale price as reported on the NASDAQ National Market System. As of July 25, 2022, there were 7,457,891,872 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive Proxy Statement to be delivered to shareholders in connection with the Annual Meeting of Shareholders to be held on December 13, 2022 are incorporated by reference into Part III.

MICROSOFT CORPORATION
FORM 10-K
For the Fiscal Year Ended June 30, 2022
INDEX

	<u>Page</u>
PART I	
Item 1. <u>Business</u>	3
<u>Information about our Executive Officers</u>	21
Item 1A. <u>Risk Factors</u>	23
Item 1B. <u>Unresolved Staff Comments</u>	37
Item 2. <u>Properties</u>	37
Item 3. <u>Legal Proceedings</u>	37
Item 4. <u>Mine Safety Disclosures</u>	37
PART II	
Item 5. <u>Market for Registrant's Common Equity, Related Stockholder Matters, and Issuer Purchases of Equity Securities</u>	38
Item 6. <u>[Reserved]</u>	39
Item 7. <u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	40
Item 7A. <u>Quantitative and Qualitative Disclosures about Market Risk</u>	56
Item 8. <u>Financial Statements and Supplementary Data</u>	57
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	99
Item 9A. <u>Controls and Procedures</u>	99
<u>Report of Management on Internal Control over Financial Reporting</u>	99
<u>Report of Independent Registered Public Accounting Firm</u>	100
Item 9B. <u>Other Information</u>	101
Item 9C. <u>Disclosure Regarding Foreign Jurisdictions that Prevent Inspections</u>	101
PART III	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	101
Item 11. <u>Executive Compensation</u>	101
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	101
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	101
Item 14. <u>Principal Accountant Fees and Services</u>	101
PART IV	
Item 15. <u>Exhibit and Financial Statement Schedules</u>	102
Item 16. <u>Form 10-K Summary</u>	108
<u>Signatures</u>	109

Note About Forward-Looking Statements

This report includes estimates, projections, statements relating to our business plans, objectives, and expected operating results that are “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, Section 27A of the Securities Act of 1933, and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements may appear throughout this report, including the following sections: “Business” (Part I, Item 1 of this Form 10-K), “Risk Factors” (Part I, Item 1A of this Form 10-K), and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” (Part II, Item 7 of this Form 10-K). These forward-looking statements generally are identified by the words “believe,” “project,” “expect,” “anticipate,” “estimate,” “intend,” “strategy,” “future,” “opportunity,” “plan,” “may,” “should,” “will,” “would,” “will be,” “will continue,” “will likely result,” and similar expressions. Forward-looking statements are based on current expectations and assumptions that are subject to risks and uncertainties that may cause actual results to differ materially. We describe risks and uncertainties that could cause actual results and events to differ materially in “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and “Quantitative and Qualitative Disclosures about Market Risk” (Part II, Item 7A of this Form 10-K). Readers are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made. We undertake no obligation to update or revise publicly any forward-looking statements, whether because of new information, future events, or otherwise.

PART I

ITEM 1. BUSINESS

GENERAL

Embracing Our Future

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. Our platforms and tools help drive small business productivity, large business competitiveness, and public-sector efficiency. We are creating the tools and platforms that deliver better, faster, and more effective solutions to support new startups, improve educational and health outcomes, and empower human ingenuity.

Microsoft is innovating and expanding our entire portfolio to help people and organizations overcome today’s challenges and emerge stronger. We bring technology and products together into experiences and solutions that unlock value for our customers.

In a dynamic environment, digital technology is the key input that powers the world’s economic output. Our ecosystem of customers and partners have learned that while hybrid work is complex, embracing flexibility, different work styles, and a culture of trust can help navigate the challenges the world faces today. Organizations of all sizes have digitized business-critical functions, redefining what they can expect from their business applications. Customers are looking to unlock value while simplifying security and management. From infrastructure and data, to business applications and collaboration, we provide unique, differentiated value to customers.

We are building a distributed computing fabric – across cloud and the edge – to help every organization build, run, and manage mission-critical workloads anywhere. In the next phase of innovation, artificial intelligence (“AI”) capabilities are rapidly advancing, fueled by data and knowledge of the world. We are enabling metaverse experiences at all layers of our stack, so customers can more effectively model, automate, simulate, and predict changes within their industrial environments, feel a greater sense of presence in the new world of hybrid work, and create custom immersive worlds to enable new opportunities for connection and experimentation.

What We Offer

Founded in 1975, we develop and support software, services, devices, and solutions that deliver new value for customers and help people and businesses realize their full potential.

We offer an array of services, including cloud-based solutions that provide customers with software, services, platforms, and content, and we provide solution support and consulting services. We also deliver relevant online advertising to a global audience.

Our products include operating systems, cross-device productivity and collaboration applications, server applications, business solution applications, desktop and server management tools, software development tools, and video games. We also design and sell devices, including PCs, tablets, gaming and entertainment consoles, other intelligent devices, and related accessories.

The Ambitions That Drive Us

To achieve our vision, our research and development efforts focus on three interconnected ambitions:

- Reinvent productivity and business processes.
- Build the intelligent cloud and intelligent edge platform.
- Create more personal computing.

Reinvent Productivity and Business Processes

At Microsoft, we provide technology and resources to help our customers create a secure hybrid work environment. Our family of products plays a key role in the ways the world works, learns, and connects.

Our growth depends on securely delivering continuous innovation and advancing our leading productivity and collaboration tools and services, including Office 365, Dynamics 365, and LinkedIn. Microsoft 365 brings together Office 365, Windows, and Enterprise Mobility + Security to help organizations empower their employees with AI-backed tools that unlock creativity, increase collaboration, and fuel innovation, all the while enabling compliance coverage and data protection. Microsoft Teams is a comprehensive platform for work, with meetings, calls, chat, collaboration, and business process automation. Microsoft Viva is an employee experience platform that brings together communications, knowledge, learning, resources, and insights powered by Microsoft 365. Together with the Microsoft Cloud, Dynamics 365, Microsoft Teams, and Azure Synapse bring a new era of collaborative applications that transform every business function and process. Microsoft Power Platform is helping domain experts drive productivity gains with low-code/no-code tools, robotic process automation, virtual agents, and business intelligence. In a dynamic labor market, LinkedIn is helping professionals use the platform to connect, learn, grow, and get hired.

Build the Intelligent Cloud and Intelligent Edge Platform

As digital transformation accelerates, organizations in every sector across the globe can address challenges that will have a fundamental impact on their success. For enterprises, digital technology empowers employees, optimizes operations, engages customers, and in some cases, changes the very core of products and services. Microsoft has a proven track record of delivering high value to our customers across many diverse and durable growth markets.

We continue to invest in high performance and sustainable computing to meet the growing demand for fast access to Microsoft services provided by our network of cloud computing infrastructure and datacenters. Azure is a trusted cloud with comprehensive compliance coverage and AI-based security built in.

Our cloud business benefits from three economies of scale: datacenters that deploy computational resources at significantly lower cost per unit than smaller ones; datacenters that coordinate and aggregate diverse customer, geographic, and application demand patterns, improving the utilization of computing, storage, and network resources; and multi-tenancy locations that lower application maintenance labor costs.

The Microsoft Cloud is the most comprehensive and trusted cloud, providing the best integration across the technology stack while offering openness, improving time to value, reducing costs, and increasing agility. Being a global-scale cloud, Azure uniquely offers hybrid consistency, developer productivity, AI capabilities, and trusted security and compliance. We see more emerging use cases and needs for compute and security at the edge and are accelerating our innovation across the spectrum of intelligent edge devices, from Internet of Things ("IoT") sensors to gateway devices and edge hardware to build, manage, and secure edge workloads. With Azure Stack, organizations can extend Azure into their own datacenters to create a consistent stack across the public cloud and the intelligent edge.

Our hybrid infrastructure consistency spans security, compliance, identity, and management, helping to support the real-world needs and evolving regulatory requirements of commercial customers and enterprises. Our industry clouds bring together capabilities across the entire Microsoft Cloud, along with industry-specific customizations, to improve time to value, increase agility, and lower costs. Azure Arc simplifies governance and management by delivering a consistent multi-cloud and on-premises management platform. Security, compliance, identity, and management underlie our entire tech stack. We offer integrated, end-to-end capabilities to protect people and organizations.

In March 2022, we completed our acquisition of Nuance Communications, Inc. ("Nuance"). Together, Microsoft and Nuance will enable organizations across industries to accelerate their business goals with security-focused, cloud-based solutions infused with powerful, vertically optimized AI.

We are accelerating our development of mixed reality solutions with new Azure services and devices. Microsoft Mesh enables presence and shared experiences from anywhere through mixed reality applications. The opportunity to merge the physical and digital worlds, when combined with the power of Azure cloud services, unlocks new workloads and experiences to create common understanding and drive more informed decisions.

The ability to convert data into AI drives our competitive advantage. Azure SQL Database makes it possible for customers to take SQL Server from their on-premises datacenter to a fully managed instance in the cloud to utilize built-in AI. Azure Synapse brings together data integration, enterprise data warehousing, and big data analytics in a comprehensive solution. We are accelerating adoption of AI innovations from research to products. Our innovation helps every developer be an AI developer, with approachable new tools from Azure Machine Learning Studio for creating simple machine learning models, to the powerful Azure Machine Learning Workbench for the most advanced AI modeling and data science. From GitHub to Visual Studio, we provide a developer tool chain for everyone, no matter the technical experience, across all platforms, whether Azure, Windows, or any other cloud or client platform.

Additionally, we are extending our infrastructure beyond the planet, bringing cloud computing to space. Azure Orbital is a fully managed ground station as a service for fast downlinking of data.

Create More Personal Computing

We strive to make computing more personal by putting people at the core of the experience, enabling them to interact with technology in more intuitive, engaging, and dynamic ways. Microsoft 365 is empowering people and organizations to be productive and secure as they adapt to more fluid ways of working, learning, and playing. Windows also plays a critical role in fueling our cloud business with Windows 365, a desktop operating system that's also a cloud service. From another internet-connected device, including Android or macOS devices, you can run Windows 365, just like a virtual machine.

With Windows 11, we have simplified the design and experience to empower productivity and inspire creativity. Windows 11 offers innovations focused on enhancing productivity and is designed to support hybrid work. It adds new experiences that include powerful task switching tools like new snap layouts, snap groups, and desktops; new ways to stay connected through Microsoft Teams chat; the information you want at your fingertips; and more. Windows 11 security and privacy features include operating system security, application security, and user and identity security.

Tools like search, news, and maps have given us immediate access to the world's information. Today, through our Search, News, Mapping, and Browse services, Microsoft delivers unique trust, privacy, and safety features. Microsoft Edge is our fast and secure browser that helps protect your data, with built-in shopping tools designed to save you time and money. Organizational tools such as Collections, Vertical Tabs, and Immersive Reader help make the most of your time while browsing, streaming, searching, and sharing.

We are committed to designing and marketing first-party devices to help drive innovation, create new device categories, and stimulate demand in the Windows ecosystem. The Surface family includes Surface Laptop Studio, Surface Laptop 4, Surface Laptop Go 2, Surface Laptop Pro 8, Surface Pro X, Surface Go 3, Surface Studio 2, and Surface Duo 2.

With three billion people actively playing games today, and a new generation steeped in interactive entertainment, Microsoft continues to invest in content, community, and cloud services. We have broadened our approach to how we think about gaming end-to-end, from the way games are created and distributed to how they are played, including cloud gaming so players can stream across PC, console, and mobile. We have a strong position with our large and growing highly engaged community of gamers, including the acquisition of ZeniMax Media Inc., the parent company of Bethesda Softworks LLC. In January 2022, we announced plans to acquire Activision Blizzard, Inc., a leader in game development and an interactive entertainment content publisher. Xbox Game Pass is a community with access to a curated library of over 100 first- and third-party console and PC titles. Xbox Cloud Gaming is Microsoft's game streaming technology that is complementary to our console hardware and gives fans the ultimate choice to play the games they want, with the people they want, on the devices they want.

Our Future Opportunity

The case for digital transformation has never been more urgent. Customers are looking to us to help improve productivity and the affordability of their products and services. We continue to develop complete, intelligent solutions for our customers that empower people to stay productive and collaborate, while safeguarding businesses and simplifying IT management. Our goal is to lead the industry in several distinct areas of technology over the long term, which we expect will translate to sustained growth. We are investing significant resources in:

- Transforming the workplace to deliver new modern, modular business applications, drive deeper insights, and improve how people communicate, collaborate, learn, work, play, and interact with one another.
- Building and running cloud-based services in ways that unleash new experiences and opportunities for businesses and individuals.
- Applying AI to drive insights and act on our customer's behalf by understanding and interpreting their needs using natural methods of communication.
- Tackling security from all angles with our integrated, end-to-end solutions spanning security, compliance, identity, and management, across all clouds and platforms.
- Inventing new gaming experiences that bring people together around their shared love for games on any devices and pushing the boundaries of innovation with console and PC gaming by creating the next wave of entertainment.
- Using Windows to fuel our cloud business, grow our share of the PC market, and drive increased engagement with our services like Microsoft 365 Consumer, Teams, Edge, Bing, Xbox Game Pass, and more.

Our future growth depends on our ability to transcend current product category definitions, business models, and sales motions. We have the opportunity to redefine what customers and partners can expect and are working to deliver new solutions that reflect the best of Microsoft.

Corporate Social Responsibility

Commitment to Sustainability

We work to ensure that technology is inclusive, trusted, and increases sustainability. We are accelerating progress toward a more sustainable future by reducing our environmental footprint, advancing research, helping our customers build sustainable solutions, and advocating for policies that benefit the environment. In January 2020, we announced a bold commitment and detailed plan to be carbon negative by 2030, and to remove from the environment by 2050 all the carbon we have emitted since our founding in 1975. This included a commitment to invest \$1 billion over four years in new technologies and innovative climate solutions. We built on this pledge by adding commitments to be water positive by 2030, zero waste by 2030, and to protect ecosystems by developing a Planetary Computer. We also help our suppliers and customers around the world use Microsoft technology to reduce their own carbon footprint.

Fiscal year 2021 was a year of both successes and challenges. While we continued to make progress on several of our goals, with an overall reduction in our combined Scope 1 and Scope 2 emissions, our Scope 3 emissions increased, due in substantial part to significant global datacenter expansions and growth in Xbox sales and usage as a result of the COVID-19 pandemic. Despite these Scope 3 increases, we will continue to build the foundations and do the work to deliver on our commitments, and help our customers and partners achieve theirs. We have learned the impact of our work will not all be felt immediately, and our experience highlights how progress won't always be linear.

While fiscal year 2021 presented us with some new learnings, we also made some great progress. A few examples that illuminate the diversity of our work include:

- We purchased the removal of 1.4 million metrics tons of carbon.
- Four of our datacenters received new or renewed Zero Waste certifications.
- We granted \$100 million to Breakthrough Energy Catalyst to accelerate the development of climate solutions the world needs to reach net-zero across four key areas: direct air capture, green hydrogen, long duration energy storage, and sustainable aviation fuel.
- We joined the First Movers Coalition as an early leader and expert partner in the carbon dioxide removal sector, with a commitment of \$200 million toward carbon removal by 2030.

Sustainability is an existential priority for our society and businesses today. This led us to create our Microsoft Cloud for Sustainability, an entirely new business process category to help organizations monitor their carbon footprint across their operations. We also joined with leading organizations to launch the Carbon Call – an initiative to mobilize collective action to solve carbon emissions and removal accounting challenges for a net zero future.

The investments we make in sustainability carry through to our products, services, and devices. We design our devices, from Surface to Xbox, to minimize their impact on the environment. Our cloud and AI services and datacenters help businesses cut energy consumption, reduce physical footprints, and design sustainable products.

Addressing Racial Injustice and Inequity

We are committed to addressing racial injustice and inequity in the United States for Black and African American communities and helping improve lived experiences at Microsoft, in employees' communities, and beyond. Our Racial Equity Initiative focuses on three multi-year pillars, each containing actions and progress we expect to make or exceed by 2025.

- Strengthening our communities: using data, technology, and partnerships to help improve the lives of Black and African American people in the United States, including our employees and their communities.
- Evolving our ecosystem: using our balance sheet and relationships with suppliers and partners to foster societal change and create new opportunities.
- Increasing representation and strengthening inclusion: build on our momentum, adding a \$150 million investment to strengthen inclusion and double the number of Black, African American, Hispanic, and Latinx leaders in the United States by 2025.

Over the last year, we collaborated with partners and worked within neighborhoods and communities to launch and scale a number of projects and programs, including: working with 70 organizations in 145 communities on the Justice Reform Initiative, expanding access to affordable broadband and devices for Black and African American communities and key institutions that support them in major urban centers, expanding access to skills and education to support Black and African American students and adults to succeed in the digital economy, and increasing technology support for nonprofits that provide critical services to Black and African American communities.

We have made meaningful progress on representation and inclusion at Microsoft. We are 90 percent of the way to our 2025 commitment to double the number of Black and African American people managers, senior individual contributors, and senior leaders in the U.S., and 50 percent of the way for Hispanic and Latinx people managers, senior individual contributors, and senior leaders in the U.S.

We exceeded our goal on increasing the percentage of transaction volumes with Black- and African American-owned financial institutions and increased our deposits with Black- and African American-owned minority depository institutions, enabling increased funds into local communities. Additionally, we enriched our supplier pipeline, reaching more than 90 percent of our goal to spend \$500 million with double the number of Black and African American-owned suppliers. We also increased the number of identified partners in the Black Partner Growth Initiative and continue to invest in the partner community through the Black Channel Partner Alliance by supporting events focused on business growth, accelerators, and mentorship.

Progress does not undo the egregious injustices of the past or diminish those who continue to live with inequity. We are committed to leveraging our resources to help accelerate diversity and inclusion across our ecosystem and to hold ourselves accountable to accelerate change – for Microsoft, and beyond.

Investing in Digital Skills

The COVID-19 pandemic led to record unemployment, disrupting livelihoods of people around the world. After helping over 30 million people in 249 countries and territories with our global skills initiative, we introduced a new initiative to support a more skills-based labor market, with greater flexibility and accessible learning paths to develop the right skills needed for the most in-demand jobs. Our skills initiative brings together learning resources, certification opportunities, and job-seeker tools from LinkedIn, GitHub, and Microsoft Learn, and is built on data insights drawn from LinkedIn's Economic Graph. We previously invested \$20 million in key non-profit partnerships through Microsoft Philanthropies to help people from underserved communities that are often excluded by the digital economy.

We also launched a national campaign with U.S. community colleges to help skill and recruit into the cybersecurity workforce 250,000 people by 2025, representing half of the country's workforce shortage. To that end, we are making curriculum available free of charge to all of the nation's public community colleges, providing training for new and existing faculty at 150 community colleges, and providing scholarships and supplemental resources to 25,000 students.

HUMAN CAPITAL RESOURCES

Overview

Microsoft aims to recruit, develop, and retain world-changing talent from a diversity of backgrounds. To foster their and our success, we seek to create an environment where people can thrive, where they can do their best work, where they can proudly be their authentic selves, guided by our values, and where they know their needs can be met. We strive to maximize the potential of our human capital resources by creating a respectful, rewarding, and inclusive work environment that enables our global employees to create products and services that further our mission to empower every person and every organization on the planet to achieve more.

As of June 30, 2022, we employed approximately 221,000 people on a full-time basis, 122,000 in the U.S. and 99,000 internationally. Of the total employed people, 85,000 were in operations, including manufacturing, distribution, product support, and consulting services; 73,000 were in product research and development; 47,000 were in sales and marketing; and 16,000 were in general and administration. Certain employees are subject to collective bargaining agreements.

Our Culture

Microsoft's culture is grounded in the growth mindset. This means everyone is on a continuous journey to learn and grow. We believe potential can be nurtured and is not pre-determined, and we should always be learning and curious – trying new things without fear of failure. We identified four attributes that allow growth mindset to flourish:

- Obsessing over what matters to our customers.
- Becoming more diverse and inclusive in everything we do.
- Operating as one company, One Microsoft, instead of multiple siloed businesses.
- Making a difference in the lives of each other, our customers, and the world around us.

Our employee listening systems enable us to gather feedback directly from our workforce to inform our programs and employee needs globally. Seventy percent of employees globally participated in our fiscal year 2022 Employee Signals survey, which covers a variety of topics such as thriving, inclusion, team culture, wellbeing, and learning and development. Throughout the fiscal year, we collect over 75,000 Daily Pulse employee survey responses. During fiscal year 2022, our Daily Pulse surveys gave us invaluable insights into ways we could support employees through the COVID-19 pandemic, addressing racial injustice, the war in Ukraine, and their general wellbeing. In addition to Employee Signals and Daily Pulse surveys, we gain insights through onboarding, internal mobility, leadership, performance and development, exit surveys, internal Yammer channels, employee Q&A sessions, and AskHR Service support.

Diversity and Inclusion

At Microsoft we have an inherently inclusive mission: to empower every person and every organization on the planet to achieve more. We think of diversity and inclusion as core to our business model, informing our actions to impact economies and people around the world. There are billions of people who want to achieve more, but have a different set of circumstances, abilities, and backgrounds that often limit access to opportunity and achievement. The better we represent that diversity inside Microsoft, the more effectively we can innovate for those we seek to empower.

We strive to include others by holding ourselves accountable for diversity, driving global systemic change in our workplace and workforce, and creating an inclusive work environment. Through this commitment we can allow everyone the chance to be their authentic selves and do their best work every day. We support multiple highly active Employee Resource Groups for women, families, racial and ethnic minorities, military, people with disabilities, and employees who identify as LGBTQIA+, where employees can go for support, networking, and community-building. As described in our 2021 Proxy Statement, annual performance and compensation reviews of our senior leadership team include an evaluation of their contributions to employee culture and diversity. To ensure accountability over time, we publicly disclose our progress on a multitude of workforce metrics including:

- Detailed breakdowns of gender, racial, and ethnic minority representation in our employee population, with data by job types, levels, and segments of our business.
- Our EEO-1 report (equal employment opportunity).
- Disability representation.
- Pay equity (see details below).

Total Rewards

We develop dynamic, sustainable, market-driven, and strategic programs with the goal of providing a highly differentiated portfolio to attract, reward, and retain top talent and enable our employees to thrive. These programs reinforce our culture and values such as collaboration and growth mindset. Managers evaluate and recommend rewards based on, for example, how well we leverage the work of others and contribute to the success of our colleagues. We monitor pay equity and career progress across multiple dimensions.

As part of our effort to promote a One Microsoft and inclusive culture, in fiscal year 2021 we expanded stock eligibility to all Microsoft employees as part of our annual rewards process. This includes all non-exempt and exempt employees and equivalents across the globe including business support professionals and datacenter and retail employees. In response to the Great Reshuffle, in fiscal year 2022 we announced a sizable investment in annual merit and annual stock award opportunity for all employees below senior executive levels. We also invested in base salary adjustments for our datacenter and retail hourly employees and hourly equivalents outside the U.S. These investments have supported retention and help to ensure that Microsoft remains an employer of choice.

Pay Equity

In our 2021 Diversity and Inclusion Report, we reported that all racial and ethnic minority employees in the U.S. combined earn \$1.006 for every \$1.000 earned by their white counterparts, that women in the U.S. earn \$1.002 for every \$1.000 earned by their counterparts in the U.S. who are men, and women in the U.S. plus our twelve other largest employee geographies representing 86.6% of our global population (Australia, Canada, China, France, Germany, India, Ireland, Israel, Japan, Romania, Singapore, and the United Kingdom) combined earn \$1.001 for every \$1.000 by men in these countries. Our intended result is a global performance and development approach that fosters our culture, and competitive compensation that ensures equitable pay by role while supporting pay for performance.

Wellness and Safety

Microsoft is committed to supporting our employees' well-being and safety while they are at work and in their personal lives.

We took a wide variety of measures to protect the health and well-being of our employees, suppliers, and customers during the COVID-19 pandemic and are now supporting employees in shifting to return to office and/or hybrid arrangements. We developed hybrid guidelines for managers and employees to support the transition and continue to identify ways we can support hybrid work scenarios through our employee listening systems.

We have invested significantly in holistic wellbeing, and offer a differentiated benefits package which includes many physical, emotional, and financial wellness programs including counseling through the Microsoft CARES Employee Assistance Program, mental wellbeing support, flexible fitness benefits, savings and investment tools, adoption assistance, and back-up care for children and elders. Finally, our Occupational Health and Safety program helps ensure employees can stay safe while they are working.

We continue to strive to support our Ukrainian employees and their dependents during the Ukraine crisis with emergency relocation assistance, emergency leave, and other benefits.

Learning and Development

Our growth mindset culture begins with valuing learning over knowing – seeking out new ideas, driving innovation, embracing challenges, learning from failure, and improving over time. To support this culture, we offer a wide range of learning and development opportunities. We believe learning can be more than formal instruction, and our learning philosophy focuses on providing the right learning, at the right time, in the right way. Opportunities include:

- Personalized, integrated, and relevant views of all learning opportunities on both our internal learning portal Learning (Viva Learning + LinkedIn Learning) and our external learning portal MS Learn are available to all employees worldwide.
- In-the-classroom learning, learning cohorts, our early-in-career Aspire program, and manager excellence communities.
- Required learning for all employees and managers on topics such as compliance, regulation, company culture, leadership, and management. This includes the annual Standards of Business Conduct training.
- On-the-job “stretch” and advancement opportunities.
- Managers holding conversations about employees’ career and development plans, coaching on career opportunities, and programs like mentoring and sponsorship.
- Customized manager learning to build people manager capabilities and similar learning solutions to build leadership skills for all employees including differentiated leadership development programs.
- New employee orientation covering a range of topics including company values, and culture, as well as ongoing onboarding programs.
- New tools to assist managers and employees in learning how to operate, be productive, and connect in the new flexible hybrid world of work. These include quick guides for teams to use, such as Creating Team Agreements, Reconnecting as a Team, and Running Effective Hybrid Meetings.

Our employees embrace the growth mindset and take advantage of the formal learning opportunities as well as thousands of informal and on-the-job learning opportunities. In terms of formal on-line learning solutions, in fiscal year 2022 our employees completed over 4.7 million courses, averaging over 14 hours per employee. Given our focus on understanding core company beliefs and compliance topics, all employees complete required learning programs like Standards of Business Conduct, Privacy, Unconscious Bias, and preventing harassment courses. Our corporate learning portal has over 100,000 average monthly active users. We have over 27,000 people managers, all of whom must complete between 20-33 hours of required manager capability and excellence training and are assigned ongoing required training each year. In addition, all employees complete skills training based on the profession they are in each year.

New Ways of Working

The COVID-19 pandemic accelerated our capabilities and culture with respect to flexible work. We introduced a Hybrid Workplace Flexibility Guide to better support managers and employees as they adapt to new ways of working that shift paradigms, embrace flexibility, promote inclusion, and drive innovation. Our ongoing survey data shows employees value the flexibility related to work location, work site, and work hours, and while many have begun returning to worksites as conditions have permitted, they also continue to adjust hours and/or spend some of workweeks working at home, another site, or remotely. We are focused on building capabilities to support a variety of workstyles where individuals, teams, and our business can deliver success.

OPERATING SEGMENTS

We operate our business and report our financial performance using three segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing. Our segments provide management with a comprehensive financial view of our key businesses. The segments enable the alignment of strategies and objectives across the development, sales, marketing, and services organizations, and they provide a framework for timely and rational allocation of resources within businesses.

Additional information on our operating segments and geographic and product information is contained in Note 19 – Segment Information and Geographic Data of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K).

Our reportable segments are described below.

Productivity and Business Processes

Our Productivity and Business Processes segment consists of products and services in our portfolio of productivity, communication, and information services, spanning a variety of devices and platforms. This segment primarily comprises:

- Office Commercial (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, and Microsoft Viva.
- Office Consumer, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services.
- LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions.
- Dynamics business solutions, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM, Customer Insights, Power Apps, and Power Automate; and on-premises ERP and CRM applications.

Office Commercial

Office Commercial is designed to increase personal, team, and organizational productivity through a range of products and services. Growth depends on our ability to reach new users in new markets such as frontline workers, small and medium businesses, and growth markets, as well as add value to our core product and service offerings to span productivity categories such as communication, collaboration, analytics, security, and compliance. Office Commercial revenue is mainly affected by a combination of continued installed base growth and average revenue per user expansion, as well as the continued shift from Office licensed on-premises to Office 365.

Office Consumer

Office Consumer is designed to increase personal productivity through a range of products and services. Growth depends on our ability to reach new users, add value to our core product set, and continue to expand our product and service offerings into new markets. Office Consumer revenue is mainly affected by the percentage of customers that buy Office with their new devices and the continued shift from Office licensed on-premises to Microsoft 365 Consumer subscriptions. Office Consumer Services revenue is mainly affected by the demand for communication and storage through Skype, Outlook.com, and OneDrive, which is largely driven by subscriptions, advertising, and the sale of minutes.

LinkedIn

LinkedIn connects the world's professionals to make them more productive and successful and transforms the way companies hire, market, sell, and learn. Our vision is to create economic opportunity for every member of the global workforce through the ongoing development of the world's first Economic Graph, a digital representation of the global economy. In addition to LinkedIn's free services, LinkedIn offers monetized solutions: Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions. Talent Solutions provide insights for workforce planning and tools to hire, nurture, and develop talent. Talent Solutions also includes Learning Solutions, which help businesses close critical skills gaps in times where companies are having to do more with existing talent. Marketing Solutions help companies reach, engage, and convert their audiences at scale. Premium Subscriptions enables professionals to manage their professional identity, grow their network, and connect with talent through additional services like premium search. Sales Solutions help companies strengthen customer relationships, empower teams with digital selling tools, and acquire new opportunities. LinkedIn has over 850 million members and has offices around the globe. Growth will depend on our ability to increase the number of LinkedIn members and our ability to continue offering services that provide value for our members and increase their engagement. LinkedIn revenue is mainly affected by demand from enterprises and professional organizations for subscriptions to Talent Solutions, Sales Solutions, and Premium Subscriptions offerings, as well as member engagement and the quality of the sponsored content delivered to those members to drive Marketing Solutions.

Dynamics

Dynamics provides cloud-based and on-premises business solutions for financial management, enterprise resource planning ("ERP"), customer relationship management ("CRM"), supply chain management, and other application development platforms for small and medium businesses, large organizations, and divisions of global enterprises. Dynamics revenue is driven by the number of users licensed and applications consumed, expansion of average revenue per user, and the continued shift to Dynamics 365, a unified set of cloud-based intelligent business applications, including Power Apps and Power Automate.

Competition

Competitors to Office include software and global application vendors, such as Apple, Cisco Systems, Meta, Google, IBM, Okta, Proofpoint, Slack, Symantec, Zoom, and numerous web-based and mobile application competitors as well as local application developers. Apple distributes versions of its pre-installed application software, such as email and calendar products, through its PCs, tablets, and phones. Cisco Systems is using its position in enterprise communications equipment to grow its unified communications business. Google provides a hosted messaging and productivity suite. Slack provides teamwork and collaboration software. Zoom offers videoconferencing and cloud phone solutions. Okta, Proofpoint, and Symantec provide security solutions across email security, information protection, identity, and governance. Web-based offerings competing with individual applications have also positioned themselves as alternatives to our products and services. We compete by providing powerful, flexible, secure, integrated industry-specific, and easy-to-use productivity and collaboration tools and services that create comprehensive solutions and work well with technologies our customers already have both on-premises or in the cloud.

LinkedIn faces competition from online professional networks, recruiting companies, talent management companies, and larger companies that are focusing on talent management and human resource services; job boards; traditional recruiting firms; and companies that provide learning and development products and services. Marketing Solutions competes with online and offline outlets that generate revenue from advertisers and marketers, and Sales Solutions competes with online and offline outlets for companies with lead generation and customer intelligence and insights.

Dynamics competes with cloud-based and on-premises business solution providers such as Oracle, Salesforce, and SAP.

Intelligent Cloud

Our Intelligent Cloud segment consists of our public, private, and hybrid server products and cloud services that can power modern business and developers. This segment primarily comprises:

- Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses ("CALs"); and Nuance and GitHub.
- Enterprise Services, including Enterprise Support Services, Microsoft Consulting Services, and Nuance professional services.

Server Products and Cloud Services

Azure is a comprehensive set of cloud services that offer developers, IT professionals, and enterprises freedom to build, deploy, and manage applications on any platform or device. Customers can use Azure through our global network of datacenters for computing, networking, storage, mobile and web application services, AI, IoT, cognitive services, and machine learning. Azure enables customers to devote more resources to development and use of applications that benefit their organizations, rather than managing on-premises hardware and software. Azure revenue is mainly affected by infrastructure-as-a-service and platform-as-a-service consumption-based services, and per user-based services such as Enterprise Mobility + Security.

Our server products are designed to make IT professionals, developers, and their systems more productive and efficient. Server software is integrated server infrastructure and middleware designed to support software applications built on the Windows Server operating system. This includes the server platform, database, business intelligence, storage, management and operations, virtualization, service-oriented architecture platform, security, and identity software. We also license standalone and software development lifecycle tools for software architects, developers, testers, and project managers. GitHub provides a collaboration platform and code hosting service for developers. Server products revenue is mainly affected by purchases through volume licensing programs, licenses sold to original equipment manufacturers ("OEM"), and retail packaged products. CALs provide access rights to certain server products, including SQL Server and Windows Server, and revenue is reported along with the associated server product.

Nuance and GitHub include both cloud and on-premises offerings. Nuance provides healthcare and enterprise AI solutions. GitHub provides a collaboration platform and code hosting service for developers.

Enterprise Services

Enterprise Services, including Enterprise Support Services, Microsoft Consulting Services, and Nuance Professional Services, assist customers in developing, deploying, and managing Microsoft server solutions, Microsoft desktop solutions, and Nuance conversational AI and ambient intelligent solutions, along with providing training and certification to developers and IT professionals on various Microsoft products.

Competition

Azure faces diverse competition from companies such as Amazon, Google, IBM, Oracle, VMware, and open source offerings. Our Enterprise Mobility + Security offerings also compete with products from a range of competitors including identity vendors, security solution vendors, and numerous other security point solution vendors. Azure's competitive advantage includes enabling a hybrid cloud, allowing deployment of existing datacenters with our public cloud into a single, cohesive infrastructure, and the ability to run at a scale that meets the needs of businesses of all sizes and complexities. We believe our cloud's global scale, coupled with our broad portfolio of identity and security solutions, allows us to effectively solve complex cybersecurity challenges for our customers and differentiates us from the competition.

Our server products face competition from a wide variety of server operating systems and applications offered by companies with a range of market approaches. Vertically integrated computer manufacturers such as Hewlett-Packard, IBM, and Oracle offer their own versions of the Unix operating system preinstalled on server hardware. Nearly all computer manufacturers offer server hardware for the Linux operating system and many contribute to Linux operating system development. The competitive position of Linux has also benefited from the large number of compatible applications now produced by many commercial and non-commercial software developers. A number of companies, such as Red Hat, supply versions of Linux.

We compete to provide enterprise-wide computing solutions and point solutions with numerous commercial software vendors that offer solutions and middleware technology platforms, software applications for connectivity (both Internet and intranet), security, hosting, database, and e-business servers. IBM and Oracle lead a group of companies focused on the Java Platform Enterprise Edition that competes with our enterprise-wide computing solutions. Commercial competitors for our server applications for PC-based distributed client-server environments include CA Technologies, IBM, and Oracle. Our web application platform software competes with open source software such as Apache, Linux, MySQL, and PHP. In middleware, we compete against Java vendors.

Our database, business intelligence, and data warehousing solutions offerings compete with products from IBM, Oracle, SAP, Snowflake, and other companies. Our system management solutions compete with server management and server virtualization platform providers, such as BMC, CA Technologies, Hewlett-Packard, IBM, and VMware. Our products for software developers compete against offerings from Adobe, IBM, Oracle, and other companies, and also against open-source projects, including Eclipse (sponsored by CA Technologies, IBM, Oracle, and SAP), PHP, and Ruby on Rails.

We believe our server products provide customers with advantages in performance, total costs of ownership, and productivity by delivering superior applications, development tools, compatibility with a broad base of hardware and software applications, security, and manageability.

Our Enterprise Services business competes with a wide range of companies that provide strategy and business planning, application development, and infrastructure services, including multinational consulting firms and small niche businesses focused on specific technologies.

More Personal Computing

Our More Personal Computing segment consists of products and services that put customers at the center of the experience with our technology. This segment primarily comprises:

- Windows, including Windows OEM licensing ("Windows OEM") and other non-volume licensing of the Windows operating system; Windows Commercial, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings; patent licensing; and Windows Internet of Things.
- Devices, including Surface and PC accessories.
- Gaming, including Xbox hardware and Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, third-party disc royalties, advertising, and other cloud services.
- Search and news advertising.

Windows

The Windows operating system is designed to deliver a more personal computing experience for users by enabling consistency of experience, applications, and information across their devices. Windows OEM revenue is impacted significantly by the number of Windows operating system licenses purchased by OEMs, which they pre-install on the devices they sell. In addition to computing device market volume, Windows OEM revenue is impacted by:

- The mix of computing devices based on form factor and screen size.
- Differences in device market demand between developed markets and growth markets.
- Attachment of Windows to devices shipped.
- Customer mix between consumer, small and medium businesses, and large enterprises.
- Changes in inventory levels in the OEM channel.
- Pricing changes and promotions, pricing variation that occurs when the mix of devices manufactured shifts from local and regional system builders to large multinational OEMs, and different pricing of Windows versions licensed.
- Constraints in the supply chain of device components.
- Piracy.

Windows Commercial revenue, which includes volume licensing of the Windows operating system and Windows cloud services such as Microsoft Defender for Endpoint, is affected mainly by the demand from commercial customers for volume licensing and Software Assurance ("SA"), as well as advanced security offerings. Windows Commercial revenue often reflects the number of information workers in a licensed enterprise and is relatively independent of the number of PCs sold in a given year.

Patent licensing includes our programs to license patents we own for use across a broad array of technology areas, including mobile devices and cloud offerings.

Windows IoT extends the power of Windows and the cloud to intelligent systems by delivering specialized operating systems, tools, and services for use in embedded devices.

Devices

We design and sell devices, including Surface and PC accessories. Our devices are designed to enable people and organizations to connect to the people and content that matter most using Windows and integrated Microsoft products and services. Surface is designed to help organizations, students, and consumers be more productive. Growth in Devices is dependent on total PC shipments, the ability to attract new customers, our product roadmap, and expanding into new categories.

Gaming

Our gaming platform is designed to provide a variety of entertainment through a unique combination of content, community, and cloud. Our exclusive game content is created through Xbox Game Studios, a collection of first-party studios creating iconic and differentiated gaming experiences. We continue to invest in new gaming studios and content to expand our IP roadmap and leverage new content creators. These unique gaming experiences are the cornerstone of Xbox Game Pass, a subscription service and gaming community with access to a curated library of over 100 first- and third-party console and PC titles.

The gamer remains at the heart of the Xbox ecosystem. We continue to open new opportunities for gamers to engage both on- and off-console with both the launch of Xbox Cloud Gaming, our game streaming service, and continued investment in gaming hardware. Xbox Cloud Gaming utilizes Microsoft's Azure cloud technology to allow direct and on-demand streaming of games to PCs, consoles, and mobile devices, enabling gamers to take their favorite games with them and play on the device most convenient to them.

Xbox enables people to connect and share online gaming experiences that are accessible on Xbox consoles, Windows-enabled devices, and other devices. Xbox is designed to benefit users by providing access to a network of certified applications and services and to benefit our developer and partner ecosystems by providing access to a large customer base. Xbox revenue is mainly affected by subscriptions and sales of first- and third-party content, as well as advertising. Growth of our Gaming business is determined by the overall active user base through Xbox enabled content, availability of games, providing exclusive game content that gamers seek, the computational power and reliability of the devices used to access our content and services, and the ability to create new experiences through first-party content creators.

Search and News Advertising

Our Search and news advertising business is designed to deliver relevant search, native, and display advertising to a global audience. We have several partnerships with other companies, including Yahoo, through which we provide and monetize search queries. Growth depends on our ability to attract new users, understand intent, and match intent with relevant content and advertiser offerings.

On June 6, 2022, we acquired Xandr, Inc., a technology platform with tools to accelerate the delivery of our digital advertising solutions.

Competition

Windows faces competition from various software products and from alternative platforms and devices, mainly from Apple and Google. We believe Windows competes effectively by giving customers choice, value, flexibility, security, an easy-to-use interface, and compatibility with a broad range of hardware and software applications, including those that enable productivity.

Devices face competition from various computer, tablet, and hardware manufacturers who offer a unique combination of high-quality industrial design and innovative technologies across various price points. These manufacturers, many of which are also current or potential partners and customers, include Apple and our Windows OEMs.

Xbox and our cloud gaming services face competition from various online gaming ecosystems and game streaming services, including those operated by Amazon, Apple, Meta, Google, and Tencent. We also compete with other providers of entertainment services such as video streaming platforms. Our gaming platform competes with console platforms from Nintendo and Sony, both of which have a large, established base of customers. We believe our gaming platform is effectively positioned against, and uniquely differentiated from, competitive products and services based on significant innovation in hardware architecture, user interface, developer tools, online gaming and entertainment services, and continued strong exclusive content from our own first-party game franchises as well as other digital content offerings.

Our Search and news advertising business competes with Google and a wide array of websites, social platforms like Meta, and portals that provide content and online offerings to end users.

OPERATIONS

We have operations centers that support operations in their regions, including customer contract and order processing, credit and collections, information processing, and vendor management and logistics. The regional center in Ireland supports the European, Middle Eastern, and African region; the center in Singapore supports the Japan, India, Greater China, and Asia-Pacific region; and the centers in Fargo, North Dakota, Fort Lauderdale, Florida, Puerto Rico, Redmond, Washington, and Reno, Nevada support Latin America and North America. In addition to the operations centers, we also operate datacenters throughout the Americas, Europe, Australia, and Asia, as well as in the Middle East and Africa.

To serve the needs of customers around the world and to improve the quality and usability of products in international markets, we localize many of our products to reflect local languages and conventions. Localizing a product may require modifying the user interface, altering dialog boxes, and translating text.

Our devices are primarily manufactured by third-party contract manufacturers. For the majority of our products, we have the ability to use other manufacturers if a current vendor becomes unavailable or unable to meet our requirements. However, some of our products contain certain components for which there are very few qualified suppliers. For these components, we have limited near-term flexibility to use other manufacturers if a current vendor becomes unavailable or is unable to meet our requirements. Extended disruptions at these suppliers and/or manufacturers could lead to a similar disruption in our ability to manufacture devices on time to meet consumer demand.

RESEARCH AND DEVELOPMENT

Product and Service Development, and Intellectual Property

We develop most of our products and services internally through the following engineering groups.

- *Cloud and AI*, focuses on making IT professionals, developers, and their systems more productive and efficient through development of cloud infrastructure, server, database, CRM, ERP, software development tools and services (including GitHub), AI cognitive services, and other business process applications and services for enterprises.
- *Experiences and Devices*, focuses on instilling a unifying product ethos across our end-user experiences and devices, including Office, Windows, Teams, consumer web experiences (including search and news advertising), and the Surface line of devices.
- *Security, Compliance, Identity, and Management*, focuses on cloud platform and application security, identity and network access, enterprise mobility, information protection, and managed services.
- *Technology and Research*, focuses on our AI innovations and other forward-looking research and development efforts spanning infrastructure, services, and applications.
- *LinkedIn*, focuses on our services that transform the way customers hire, market, sell, and learn.
- *Gaming*, focuses on developing hardware, content, and services across a large range of platforms to help grow our user base through game experiences and social interaction.

Internal development allows us to maintain competitive advantages that come from product differentiation and closer technical control over our products and services. It also gives us the freedom to decide which modifications and enhancements are most important and when they should be implemented. We strive to obtain information as early as possible about changing usage patterns and hardware advances that may affect software and hardware design. Before releasing new software platforms, and as we make significant modifications to existing platforms, we provide application vendors with a range of resources and guidelines for development, training, and testing. Generally, we also create product documentation internally.

We protect our intellectual property investments in a variety of ways. We work actively in the U.S. and internationally to ensure the enforcement of copyright, trademark, trade secret, and other protections that apply to our software and hardware products, services, business plans, and branding. We are a leader among technology companies in pursuing patents and currently have a portfolio of over 69,000 U.S. and international patents issued and over 19,000 pending worldwide. While we employ much of our internally-developed intellectual property exclusively in our products and services, we also engage in outbound licensing of specific patented technologies that are incorporated into licensees' products. From time to time, we enter into broader cross-license agreements with other technology companies covering entire groups of patents. We may also purchase or license technology that we incorporate into our products and services. At times, we make select intellectual property broadly available at no or low cost to achieve a strategic objective, such as promoting industry standards, advancing interoperability, supporting societal and/or environmental efforts, or attracting and enabling our external development community. Our increasing engagement with open source software will also cause us to license our intellectual property rights broadly in certain situations.

While it may be necessary in the future to seek or renew licenses relating to various aspects of our products, services, and business methods, we believe, based upon past experience and industry practice, such licenses generally can be obtained on commercially reasonable terms. We believe our continuing research and product development are not materially dependent on any single license or other agreement with a third party relating to the development of our products.

Investing in the Future

Our success is based on our ability to create new and compelling products, services, and experiences for our users, to initiate and embrace disruptive technology trends, to enter new geographic and product markets, and to drive broad adoption of our products and services. We invest in a range of emerging technology trends and breakthroughs that we believe offer significant opportunities to deliver value to our customers and growth for the Company. Based on our assessment of key technology trends, we maintain our long-term commitment to research and development across a wide spectrum of technologies, tools, and platforms spanning digital work and life experiences, cloud computing, AI, devices, and operating systems.

While our main product research and development facilities are located in Redmond, Washington, we also operate research and development facilities in other parts of the U.S. and around the world. This global approach helps us remain competitive in local markets and enables us to continue to attract top talent from across the world.

We plan to continue to make significant investments in a broad range of product research and development activities, and as appropriate we will coordinate our research and development across operating segments and leverage the results across the Company.

In addition to our main research and development operations, we also operate Microsoft Research. Microsoft Research is one of the world's largest corporate research organizations and works in close collaboration with top universities around the world to advance the state-of-the-art in computer science and a broad range of other disciplines, providing us a unique perspective on future trends and contributing to our innovation.

DISTRIBUTION, SALES, AND MARKETING

We market and distribute our products and services through the following channels: OEMs, direct, and distributors and resellers. Our sales force performs a variety of functions, including working directly with commercial enterprises and public-sector organizations worldwide to identify and meet their technology and digital transformation requirements; managing OEM relationships; and supporting system integrators, independent software vendors, and other partners who engage directly with our customers to perform sales, consulting, and fulfillment functions for our products and services.

OEMs

We distribute our products and services through OEMs that pre-install our software on new devices and servers they sell. The largest component of the OEM business is the Windows operating system pre-installed on devices. OEMs also sell devices pre-installed with other Microsoft products and services, including applications such as Office and the capability to subscribe to Office 365.

There are two broad categories of OEMs. The largest category of OEMs are direct OEMs as our relationship with them is managed through a direct agreement between Microsoft and the OEM. We have distribution agreements covering one or more of our products with virtually all the multinational OEMs, including Dell, Hewlett-Packard, Lenovo, and with many regional and local OEMs. The second broad category of OEMs are system builders consisting of lower-volume PC manufacturers, which source Microsoft software for pre-installation and local redistribution primarily through the Microsoft distributor channel rather than through a direct agreement or relationship with Microsoft.

Direct

Many organizations that license our products and services transact directly with us through Enterprise Agreements and Enterprise Services contracts, with sales support from system integrators, independent software vendors, web agencies, and partners that advise organizations on licensing our products and services ("Enterprise Agreement Software Advisors" or "ESA"). Microsoft offers direct sales programs targeted to reach small, medium, and corporate customers, in addition to those offered through the reseller channel. A large network of partner advisors support many of these sales.

We also sell commercial and consumer products and services directly to customers, such as cloud services, search, and gaming, through our digital marketplaces and online stores. In fiscal year 2021, we closed our Microsoft Store physical locations and opened our Microsoft Experience Centers. Microsoft Experience Centers are designed to facilitate deeper engagement with our partners and customers across industries.

Distributors and Resellers

Organizations also license our products and services indirectly, primarily through licensing solution partners ("LSP"), distributors, value-added resellers ("VAR"), and retailers. Although each type of reselling partner may reach organizations of all sizes, LSPs are primarily engaged with large organizations, distributors resell primarily to VARs, and VARs typically reach small and medium organizations. ESAs are also typically authorized as LSPs and operate as resellers for our other volume licensing programs. Microsoft Cloud Solution Provider is our main partner program for reselling cloud services.

We distribute our retail packaged products primarily through independent non-exclusive distributors, authorized replicators, resellers, and retail outlets. Individual consumers obtain these products primarily through retail outlets. We distribute our devices through third-party retailers. We have a network of field sales representatives and field support personnel that solicit orders from distributors and resellers and provide product training and sales support.

Our Dynamics business solutions are also licensed to enterprises through a global network of channel partners providing vertical solutions and specialized services.

LICENSING OPTIONS

We offer options for organizations that want to purchase our cloud services, on-premises software, and SA. We license software to organizations under volume licensing agreements to allow the customer to acquire multiple licenses of products and services instead of having to acquire separate licenses through retail channels. We use different programs designed to provide flexibility for organizations of various sizes. While these programs may differ in various parts of the world, generally they include those discussed below.

SA conveys rights to new software and upgrades for perpetual licenses released over the contract period. It also provides support, tools, training, and other licensing benefits to help customers deploy and use software efficiently. SA is included with certain volume licensing agreements and is an optional purchase with others.

Volume Licensing Programs

Enterprise Agreement

Enterprise Agreements offer large organizations a manageable volume licensing program that gives them the flexibility to buy cloud services and software licenses under one agreement. Enterprise Agreements are designed for medium or large organizations that want to license cloud services and on-premises software organization-wide over a three-year period. Organizations can elect to purchase perpetual licenses or subscribe to licenses. SA is included.

Microsoft Customer Agreement

A Microsoft Customer Agreement is a simplified purchase agreement presented, accepted, and stored through a digital experience. A Microsoft Customer Agreement is a non-expiring agreement that is designed to support all customers over time, whether purchasing through a partner or directly from Microsoft.

Microsoft Online Subscription Agreement

A Microsoft Online Subscription Agreement is designed for small and medium organizations that want to subscribe to, activate, provision, and maintain cloud services seamlessly and directly via the web. The agreement allows customers to acquire monthly or annual subscriptions for cloud-based services.

Microsoft Products and Services Agreement

Microsoft Products and Services Agreements are designed for medium and large organizations that want to license cloud services and on-premises software as needed, with no organization-wide commitment, under a single, non-expiring agreement. Organizations purchase perpetual licenses or subscribe to licenses. SA is optional for customers that purchase perpetual licenses.

Open Value

Open Value agreements are a simple, cost-effective way to acquire the latest Microsoft technology. These agreements are designed for small and medium organizations that want to license cloud services and on-premises software over a three-year period. Under Open Value agreements, organizations can elect to purchase perpetual licenses or subscribe to licenses and SA is included.

Select Plus

A Select Plus agreement is designed for government and academic organizations to acquire on-premises licenses at any affiliate or department level, while realizing advantages as one organization. Organizations purchase perpetual licenses and SA is optional.

Partner Programs

The Microsoft Cloud Solution Provider program offers customers an easy way to license the cloud services they need in combination with the value-added services offered by their systems integrator, managed services provider, or cloud reseller partner. Partners in this program can easily package their own products and services to directly provision, manage, and support their customer subscriptions.

The Microsoft Services Provider License Agreement allows hosting service providers and independent software vendors who want to license eligible Microsoft software products to provide software services and hosted applications to their end customers. Partners license software over a three-year period and are billed monthly based on consumption.

The Independent Software Vendor Royalty program enables partners to integrate Microsoft products into other applications and then license the unified business solution to their end users.

CUSTOMERS

Our customers include individual consumers, small and medium organizations, large global enterprises, public-sector institutions, Internet service providers, application developers, and OEMs. Our practice is to ship our products promptly upon receipt of purchase orders from customers; consequently, backlog is not significant.

INFORMATION ABOUT OUR EXECUTIVE OFFICERS

Our executive officers as of July 28, 2022 were as follows:

Name	Age	Position with the Company
Satya Nadella	54	Chairman of the Board and Chief Executive Officer
Judson Althoff	49	Executive Vice President and Chief Commercial Officer
Christopher C. Capossela	52	Executive Vice President, Marketing and Consumer Business, and Chief Marketing Officer
Kathleen T. Hogan	56	Executive Vice President, Human Resources
Amy E. Hood	50	Executive Vice President, Chief Financial Officer
Bradford L. Smith	63	President and Vice Chair
Christopher D. Young	50	Executive Vice President, Business Development, Strategy, and Ventures

Mr. Nadella was appointed Chairman of the Board in June 2021 and Chief Executive Officer in February 2014. He served as Executive Vice President, Cloud and Enterprise from July 2013 until that time. From 2011 to 2013, Mr. Nadella served as President, Server and Tools. From 2009 to 2011, he was Senior Vice President, Online Services Division. From 2008 to 2009, he was Senior Vice President, Search, Portal, and Advertising. Since joining Microsoft in 1992, Mr. Nadella's roles also included Vice President of the Business Division. Mr. Nadella also serves on the Board of Directors of Starbucks Corporation.

Mr. Althoff was appointed Executive Vice President and Chief Commercial Officer in July 2021. He served as Executive Vice President, Worldwide Commercial Business from July 2017 until that time. Prior to that, Mr. Althoff served as the President of Microsoft North America. Mr. Althoff joined Microsoft in March 2013 as President of Microsoft North America.

Mr. Capossela was appointed Executive Vice President, Marketing and Consumer Business, and Chief Marketing Officer in July 2016. He had served as Executive Vice President, Chief Marketing Officer since March 2014. Previously, he served as the worldwide leader of the Consumer Channels Group, responsible for sales and marketing activities with OEMs, operators, and retail partners. In his more than 25 years at Microsoft, Mr. Capossela has held a variety of marketing leadership roles in the Microsoft Office Division. He was responsible for marketing productivity solutions including Microsoft Office, Office 365, SharePoint, Exchange, Skype for Business, Project, and Visio.

Ms. Hogan was appointed Executive Vice President, Human Resources in November 2014. Prior to that Ms. Hogan was Corporate Vice President of Microsoft Services. She also served as Corporate Vice President of Customer Service and Support. Ms. Hogan joined Microsoft in 2003. Ms. Hogan also serves on the Board of Directors of Alaska Air Group, Inc.

Ms. Hood was appointed Executive Vice President and Chief Financial Officer in July 2013, subsequent to her appointment as Chief Financial Officer in May 2013. From 2010 to 2013, Ms. Hood was Chief Financial Officer of the Microsoft Business Division. From 2006 through 2009, Ms. Hood was General Manager, Microsoft Business Division Strategy. Since joining Microsoft in 2002, Ms. Hood has also held finance-related positions in the Server and Tools Business and the corporate finance organization. Ms. Hood also serves on the Board of Directors of 3M Corporation.

Mr. Smith was appointed President and Vice Chair in September 2021. Prior to that, he served as President and Chief Legal Officer since September 2015. He served as Executive Vice President, General Counsel, and Secretary from 2011 to 2015, and served as Senior Vice President, General Counsel, and Secretary from 2001 to 2011. Mr. Smith was also named Chief Compliance Officer in 2002. Since joining Microsoft in 1993, he was Deputy General Counsel for Worldwide Sales and previously was responsible for managing the European Law and Corporate Affairs Group, based in Paris. Mr. Smith also serves on the Board of Directors of Netflix, Inc.

Mr. Young has served as Executive Vice President, Business Development, Strategy, and Ventures since joining Microsoft in November 2020. Prior to Microsoft, he served as the Chief Executive Officer of McAfee, LLC from 2017 to 2020, and served as a Senior Vice President and General Manager of Intel Security Group from 2014 until 2017, when he led the initiative to spin out McAfee into a standalone company. Mr. Young also serves on the Board of Directors of American Express Company.

AVAILABLE INFORMATION

Our Internet address is www.microsoft.com. At our Investor Relations website, www.microsoft.com/investor, we make available free of charge a variety of information for investors. Our goal is to maintain the Investor Relations website as a portal through which investors can easily find or navigate to pertinent information about us, including:

- Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to those reports, as soon as reasonably practicable after we electronically file that material with or furnish it to the Securities and Exchange Commission ("SEC") at www.sec.gov.
- Information on our business strategies, financial results, and metrics for investors.
- Announcements of investor conferences, speeches, and events at which our executives talk about our product, service, and competitive strategies. Archives of these events are also available.
- Press releases on quarterly earnings, product and service announcements, legal developments, and international news.
- Corporate governance information including our articles of incorporation, bylaws, governance guidelines, committee charters, codes of conduct and ethics, global corporate social responsibility initiatives, and other governance-related policies.
- Other news and announcements that we may post from time to time that investors might find useful or interesting.
- Opportunities to sign up for email alerts to have information pushed in real time.

We publish a variety of reports and resources related to our Corporate Social Responsibility programs and progress on our Reports Hub website, www.microsoft.com/corporate-responsibility/reports-hub, including reports on sustainability, responsible sourcing, accessibility, digital trust, and public policy engagement.

The information found on these websites is not part of, or incorporated by reference into, this or any other report we file with, or furnish to, the SEC. In addition to these channels, we use social media to communicate to the public. It is possible that the information we post on social media could be deemed to be material to investors. We encourage investors, the media, and others interested in Microsoft to review the information we post on the social media channels listed on our Investor Relations website.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties, including those described below, that could adversely affect our business, financial condition, results of operations, cash flows, and the trading price of our common stock.

STRATEGIC AND COMPETITIVE RISKS

We face intense competition across all markets for our products and services, which may lead to lower revenue or operating margins.

Competition in the technology sector

Our competitors range in size from diversified global companies with significant research and development resources to small, specialized firms whose narrower product lines may let them be more effective in deploying technical, marketing, and financial resources. Barriers to entry in many of our businesses are low and many of the areas in which we compete evolve rapidly with changing and disruptive technologies, shifting user needs, and frequent introductions of new products and services. Our ability to remain competitive depends on our success in making innovative products, devices, and services that appeal to businesses and consumers.

Competition among platform-based ecosystems

An important element of our business model has been to create platform-based ecosystems on which many participants can build diverse solutions. A well-established ecosystem creates beneficial network effects among users, application developers, and the platform provider that can accelerate growth. Establishing significant scale in the marketplace is necessary to achieve and maintain attractive margins. We face significant competition from firms that provide competing platforms.

- A competing vertically-integrated model, in which a single firm controls the software and hardware elements of a product and related services, has succeeded with some consumer products such as personal computers, tablets, phones, gaming consoles, wearables, and other endpoint devices. Competitors pursuing this model also earn revenue from services integrated with the hardware and software platform, including applications and content sold through their integrated marketplaces. They may also be able to claim security and performance benefits from their vertically integrated offer. We also offer some vertically-integrated hardware and software products and services. To the extent we shift a portion of our business to a vertically integrated model we increase our cost of revenue and reduce our operating margins.
- We derive substantial revenue from licenses of Windows operating systems on PCs. We face significant competition from competing platforms developed for new devices and form factors such as smartphones and tablet computers. These devices compete on multiple bases including price and the perceived utility of the device and its platform. Users are increasingly turning to these devices to perform functions that in the past were performed by personal computers. Even if many users view these devices as complementary to a personal computer, the prevalence of these devices may make it more difficult to attract application developers to our PC operating system platforms. Competing with operating systems licensed at low or no cost may decrease our PC operating system margins. Popular products or services offered on competing platforms could increase their competitive strength. In addition, some of our devices compete with products made by our original equipment manufacturer ("OEM") partners, which may affect their commitment to our platform.
- Competing platforms have content and application marketplaces with scale and significant installed bases. The variety and utility of content and applications available on a platform are important to device purchasing decisions. Users may incur costs to move data and buy new content and applications when switching platforms. To compete, we must successfully enlist developers to write applications for our platform and ensure that these applications have high quality, security, customer appeal, and value. Efforts to compete with competitors' content and application marketplaces may increase our cost of revenue and lower our operating margins. Competitors' rules governing their content and applications marketplaces may restrict our ability to distribute products and services through them in accordance with our technical and business model objectives.

Business model competition

Companies compete with us based on a growing variety of business models.

- Even as we transition more of our business to infrastructure-, platform-, and software-as-a-service business model, the license-based proprietary software model generates a substantial portion of our software revenue. We bear the costs of converting original ideas into software products through investments in research and development, offsetting these costs with the revenue received from licensing our products. Many of our competitors also develop and sell software to businesses and consumers under this model.
- Other competitors develop and offer free applications, online services and content, and make money by selling third-party advertising. Advertising revenue funds development of products and services these competitors provide to users at no or little cost, competing directly with our revenue-generating products.
- Some companies compete with us by modifying and then distributing open source software at little or no cost to end users, and earning revenue on advertising or integrated products and services. These firms do not bear the full costs of research and development for the open source software. Some open source software mimics the features and functionality of our products.

The competitive pressures described above may cause decreased sales volumes, price reductions, and/or increased operating costs, such as for research and development, marketing, and sales incentives. This may lead to lower revenue, gross margins, and operating income.

Our increasing focus on cloud-based services presents execution and competitive risks. A growing part of our business involves cloud-based services available across the spectrum of computing devices. Our strategic vision is to compete and grow by building best-in-class platforms and productivity services for an intelligent cloud and an intelligent edge infused with artificial intelligence ("AI"). At the same time, our competitors are rapidly developing and deploying cloud-based services for consumers and business customers. Pricing and delivery models are evolving. Devices and form factors influence how users access services in the cloud and sometimes the user's choice of which cloud-based services to use. We are devoting significant resources to develop and deploy our cloud-based strategies. The Windows ecosystem must continue to evolve with this changing environment. We embrace cultural and organizational changes to drive accountability and eliminate obstacles to innovation. Our intelligent cloud and intelligent edge worldview is connected with the growth of the Internet of Things ("IoT"). Our success in the IoT will depend on the level of adoption of our offerings such as Azure, Azure Stack, Azure IoT Edge, and Azure Sphere. We may not establish market share sufficient to achieve scale necessary to meet our business objectives.

Besides software development costs, we are incurring costs to build and maintain infrastructure to support cloud computing services. These costs will reduce the operating margins we have previously achieved. Whether we succeed in cloud-based services depends on our execution in several areas, including:

- Continuing to bring to market compelling cloud-based experiences that generate increasing traffic and market share.
- Maintaining the utility, compatibility, and performance of our cloud-based services on the growing array of computing devices, including PCs, smartphones, tablets, gaming consoles, and other devices, as well as sensors and other IoT endpoints.
- Continuing to enhance the attractiveness of our cloud platforms to third-party developers.
- Ensuring our cloud-based services meet the reliability expectations of our customers and maintain the security of their data as well as help them meet their own compliance needs.
- Making our suite of cloud-based services platform-agnostic, available on a wide range of devices and ecosystems, including those of our competitors.

It is uncertain whether our strategies will attract the users or generate the revenue required to succeed. If we are not effective in executing organizational and technical changes to increase efficiency and accelerate innovation, or if we fail to generate sufficient usage of our new products and services, we may not grow revenue in line with the infrastructure and development investments described above. This may negatively impact gross margins and operating income.

RISKS RELATING TO THE EVOLUTION OF OUR BUSINESS

We make significant investments in products and services that may not achieve expected returns. We will continue to make significant investments in research, development, and marketing for existing products, services, and technologies, including the Windows operating system, Microsoft 365, Office, Bing, SQL Server, Windows Server, Azure, Office 365, Xbox, LinkedIn, and other products and services. We also invest in the development and acquisition of a variety of hardware for productivity, communication, and entertainment including PCs, tablets, gaming devices, and HoloLens. Investments in new technology are speculative. Commercial success depends on many factors, including innovativeness, developer support, and effective distribution and marketing. If customers do not perceive our latest offerings as providing significant new functionality or other value, they may reduce their purchases of new software and hardware products or upgrades, unfavorably affecting revenue. We may not achieve significant revenue from new product, service, and distribution channel investments for several years, if at all. New products and services may not be profitable, and even if they are profitable, operating margins for some new products and businesses will not be as high as the margins we have experienced historically. We may not get engagement in certain features, like Edge and Bing, that drive post-sale monetization opportunities. Our data handling practices across our products and services will continue to be under scrutiny and perceptions of mismanagement, driven by regulatory activity or negative public reaction to our practices or product experiences, could negatively impact product and feature adoption, product design, and product quality.

Developing new technologies is complex. It can require long development and testing periods. Significant delays in new releases or significant problems in creating new products or services could adversely affect our revenue.

Acquisitions, joint ventures, and strategic alliances may have an adverse effect on our business. We expect to continue making acquisitions and entering into joint ventures and strategic alliances as part of our long-term business strategy. For example, in March 2021 we completed our acquisition of ZeniMax Media Inc. for \$8.1 billion, and in March 2022 we completed our acquisition of Nuance Communications, Inc. for \$18.8 billion. In January 2022 we announced a definitive agreement to acquire Activision Blizzard, Inc. for \$68.7 billion. These acquisitions and other transactions and arrangements involve significant challenges and risks, including that they do not advance our business strategy, that we get an unsatisfactory return on our investment, that they raise new compliance-related obligations and challenges, that we have difficulty integrating and retaining new employees, business systems, and technology, that they distract management from our other businesses, or that announced transactions may not be completed. If an arrangement fails to adequately anticipate changing circumstances and interests of a party, it may result in early termination or renegotiation of the arrangement. The success of these transactions and arrangements will depend in part on our ability to leverage them to enhance our existing products and services or develop compelling new ones, as well as acquired companies' ability to meet our policies and processes in areas such as data governance, privacy, and cybersecurity. It may take longer than expected to realize the full benefits from these transactions and arrangements such as increased revenue or enhanced efficiencies, or the benefits may ultimately be smaller than we expected. These events could adversely affect our consolidated financial statements.

If our goodwill or amortizable intangible assets become impaired, we may be required to record a significant charge to earnings. We acquire other companies and intangible assets and may not realize all the economic benefit from those acquisitions, which could cause an impairment of goodwill or intangibles. We review our amortizable intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. We test goodwill for impairment at least annually. Factors that may be a change in circumstances, indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable, include a decline in our stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in industry segments in which we participate. We have in the past recorded, and may in the future be required to record, a significant charge in our consolidated financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, negatively affecting our results of operations.

CYBERSECURITY, DATA PRIVACY, AND PLATFORM ABUSE RISKS

Cyberattacks and security vulnerabilities could lead to reduced revenue, increased costs, liability claims, or harm to our reputation or competitive position.

Security of our information technology

Threats to IT security can take a variety of forms. Individual and groups of hackers and sophisticated organizations, including state-sponsored organizations or nation-states, continuously undertake attacks that pose threats to our customers and our IT. These actors may use a wide variety of methods, which may include developing and deploying malicious software or exploiting vulnerabilities in hardware, software, or other infrastructure in order to attack our products and services or gain access to our networks and datacenters, using social engineering techniques to induce our employees, users, partners, or customers to disclose passwords or other sensitive information or take other actions to gain access to our data or our users' or customers' data, or acting in a coordinated manner to launch distributed denial of service or other coordinated attacks. Nation-state and state-sponsored actors can deploy significant resources to plan and carry out exploits. Nation-state attacks against us or our customers may intensify during periods of intense diplomatic or armed conflict, such as the ongoing conflict in Ukraine. Inadequate account security practices may also result in unauthorized access to confidential data. For example, system administrators may fail to timely remove employee account access when no longer appropriate. Employees or third parties may intentionally compromise our or our users' security or systems or reveal confidential information. Malicious actors may employ the IT supply chain to introduce malware through software updates or compromised supplier accounts or hardware.

Cyberthreats are constantly evolving and becoming increasingly sophisticated and complex, increasing the difficulty of detecting and successfully defending against them. We may have no current capability to detect certain vulnerabilities, which may allow them to persist in the environment over long periods of time. Cyberthreats can have cascading impacts that unfold with increasing speed across our internal networks and systems and those of our partners and customers. Breaches of our facilities, network, or data security could disrupt the security of our systems and business applications, impair our ability to provide services to our customers and protect the privacy of their data, result in product development delays, compromise confidential or technical business information harming our reputation or competitive position, result in theft or misuse of our intellectual property or other assets, subject us to ransomware attacks, require us to allocate more resources to improve technologies or remediate the impacts of attacks, or otherwise adversely affect our business.

The cyberattacks uncovered in late 2020 known as "Solorigate" or "Nobelium" are an example of a supply chain attack where malware was introduced to a software provider's customers, including us, through software updates. The attackers were later able to create false credentials that appeared legitimate to certain customers' systems. We may be targets of further attacks similar to Solorigate/Nobelium as both a supplier and consumer of IT.

In addition, our internal IT environment continues to evolve. Often, we are early adopters of new devices and technologies. We embrace new ways of sharing data and communicating internally and with partners and customers using methods such as social networking and other consumer-oriented technologies. Our business policies and internal security controls may not keep pace with these changes as new threats emerge, or emerging cybersecurity regulations in jurisdictions worldwide.

Security of our products, services, devices, and customers' data

The security of our products and services is important in our customers' decisions to purchase or use our products or services across cloud and on-premises environments. Security threats are a significant challenge to companies like us whose business is providing technology products and services to others. Threats to our own IT infrastructure can also affect our customers. Customers using our cloud-based services rely on the security of our infrastructure, including hardware and other elements provided by third parties, to ensure the reliability of our services and the protection of their data. Adversaries tend to focus their efforts on the most popular operating systems, programs, and services, including many of ours, and we expect that to continue. In addition, adversaries can attack our customers' on-premises or cloud environments, sometimes exploiting previously unknown ("zero day") vulnerabilities, such as occurred in early calendar year 2021 with several of our Exchange Server on-premises products. Vulnerabilities in these or any product can persist even after we have issued security patches if customers have not installed the most recent updates, or if the attackers exploited the vulnerabilities before patching to install additional malware to further compromise customers' systems. Adversaries will continue to attack customers using our cloud services as customers embrace digital transformation. Adversaries that acquire user account information can use that information to compromise our users' accounts, including where accounts share the same attributes such as passwords. Inadequate account security practices may also result in unauthorized access, and user activity may result in ransomware or other malicious software impacting a customer's use of our products or services. We are increasingly incorporating open source software into our products. There may be vulnerabilities in open source software that may make our products susceptible to cyberattacks.

Our customers operate complex IT systems with third-party hardware and software from multiple vendors that may include systems acquired over many years. They expect our products and services to support all these systems and products, including those that no longer incorporate the strongest current security advances or standards. As a result, we may not be able to discontinue support in our services for a product, service, standard, or feature solely because a more secure alternative is available. Failure to utilize the most current security advances and standards can increase our customers' vulnerability to attack. Further, customers of widely varied size and technical sophistication use our technology, and consequently may have limited capabilities and resources to help them adopt and implement state of the art cybersecurity practices and technologies. In addition, we must account for this wide variation of technical sophistication when defining default settings for our products and services, including security default settings, as these settings may limit or otherwise impact other aspects of IT operations and some customers may have limited capability to review and reset these defaults.

Cyberattacks such as Solorigate/Nobelium may adversely impact our customers even if our production services are not directly compromised. We are committed to notifying our customers whose systems have been impacted as we become aware and have available information and actions for customers to help protect themselves. We are also committed to providing guidance and support on detection, tracking, and remediation. We may not be able to detect the existence or extent of these attacks for all of our customers or have information on how to detect or track an attack, especially where an attack involves on-premises software such as Exchange Server where we may have no or limited visibility into our customers' computing environments.

Development and deployment of defensive measures

To defend against security threats to our internal IT systems, our cloud-based services, and our customers' systems, we must continuously engineer more secure products and services, enhance security and reliability features, improve the deployment of software updates to address security vulnerabilities in our own products as well as those provided by others, develop mitigation technologies that help to secure customers from attacks even when software updates are not deployed, maintain the digital security infrastructure that protects the integrity of our network, products, and services, and provide security tools such as firewalls, anti-virus software, and advanced security and information about the need to deploy security measures and the impact of doing so. Customers in certain industries such as financial services, health care, and government may have enhanced or specialized requirements to which we must engineer our products and services.

The cost of measures to protect products and customer-facing services could reduce our operating margins. If we fail to do these things well, actual or perceived security vulnerabilities in our products and services, data corruption issues, or reduced performance could harm our reputation and lead customers to reduce or delay future purchases of products or subscriptions to services, or to use competing products or services. Customers may also spend more on protecting their existing computer systems from attack, which could delay adoption of additional products or services. Customers, and third parties granted access to their systems, may fail to update their systems, continue to run software or operating systems we no longer support, or may fail timely to install or enable security patches, or may otherwise fail to adopt adequate security practices. Any of these could adversely affect our reputation and revenue. Actual or perceived vulnerabilities may lead to claims against us. Our license agreements typically contain provisions that eliminate or limit our exposure to liability, but there is no assurance these provisions will withstand legal challenges. At times, to achieve commercial objectives, we may enter into agreements with larger liability exposure to customers.

Our products operate in conjunction with and are dependent on products and components across a broad ecosystem of third parties. If there is a security vulnerability in one of these components, and if there is a security exploit targeting it, we could face increased costs, liability claims, reduced revenue, or harm to our reputation or competitive position.

Disclosure and misuse of personal data could result in liability and harm our reputation. As we continue to grow the number, breadth, and scale of our cloud-based offerings, we store and process increasingly large amounts of personal data of our customers and users. The continued occurrence of high-profile data breaches provides evidence of an external environment increasingly hostile to information security. Despite our efforts to improve the security controls across our business groups and geographies, it is possible our security controls over personal data, our training of employees and third parties on data security, and other practices we follow may not prevent the improper disclosure or misuse of customer or user data we or our vendors store and manage. In addition, third parties who have limited access to our customer or user data may use this data in unauthorized ways. Improper disclosure or misuse could harm our reputation, lead to legal exposure to customers or users, or subject us to liability under laws that protect personal data, resulting in increased costs or loss of revenue. Our software products and services also enable our customers and users to store and process personal data on-premises or, increasingly, in a cloud-based environment we host. Government authorities can sometimes require us to produce customer or user data in response to valid legal orders. In the U.S. and elsewhere, we advocate for transparency concerning these requests and appropriate limitations on government authority to compel disclosure. Despite our efforts to protect customer and user data, perceptions that the collection, use, and retention of personal information is not satisfactorily protected could inhibit sales of our products or services and could limit adoption of our cloud-based solutions by consumers, businesses, and government entities. Additional security measures we may take to address customer or user concerns, or constraints on our flexibility to determine where and how to operate datacenters in response to customer or user expectations or governmental rules or actions, may cause higher operating expenses or hinder growth of our products and services.

We may not be able to protect information in our products and services from use by others. LinkedIn and other Microsoft products and services contain valuable information and content protected by contractual restrictions or technical measures. In certain cases, we have made commitments to our members and users to limit access to or use of this information. Changes in the law or interpretations of the law may weaken our ability to prevent third parties from scraping or gathering information or content through use of bots or other measures and using it for their own benefit, thus diminishing the value of our products and services.

Abuse of our platforms may harm our reputation or user engagement.

Advertising, professional, marketplace, and gaming platform abuses

For platform products and services that provide content or host ads that come from or can be influenced by third parties, including GitHub, LinkedIn, Microsoft Advertising, Microsoft News, Microsoft Store, Bing, and Xbox, our reputation or user engagement may be negatively affected by activity that is hostile or inappropriate. This activity may come from users impersonating other people or organizations, dissemination of information that may be viewed as misleading or intended to manipulate the opinions of our users, or the use of our products or services that violates our terms of service or otherwise for objectionable or illegal ends. Preventing or responding to these actions may require us to make substantial investments in people and technology and these investments may not be successful, adversely affecting our business and consolidated financial statements.

Other digital safety abuses

Our hosted consumer services as well as our enterprise services may be used to disseminate harmful or illegal content in violation of our terms or applicable law. We may not proactively discover such content due to scale, the limitations of existing technologies, and conflicting legal frameworks. When discovered by users, such content may negatively affect our reputation, our brands, and user engagement. Regulations and other initiatives to make platforms responsible for preventing or eliminating harmful content online have been enacted, and we expect this to continue. We may be subject to enhanced regulatory oversight, civil or criminal liability, or reputational damage if we fail to comply with content moderation regulations, adversely affecting our business and consolidated financial statements.

The development of the IoT presents security, privacy, and execution risks. To support the growth of the intelligent cloud and the intelligent edge, we are developing products, services, and technologies to power the IoT, a network of distributed and interconnected devices employing sensors, data, and computing capabilities including AI. The IoT's great potential also carries substantial risks. IoT products and services may contain defects in design, manufacture, or operation that make them insecure or ineffective for their intended purposes. An IoT solution has multiple layers of hardware, sensors, processors, software, and firmware, several of which we may not develop or control. Each layer, including the weakest layer, can impact the security of the whole system. Many IoT devices have limited interfaces and ability to be updated or patched. IoT solutions may collect large amounts of data, and our handling of IoT data may not satisfy customers or regulatory requirements. IoT scenarios may increasingly affect personal health and safety. If IoT solutions that include our technologies do not work as intended, violate the law, or harm individuals or businesses, we may be subject to legal claims or enforcement actions. These risks, if realized, may increase our costs, damage our reputation or brands, or negatively impact our revenues or margins.

Issues in the development and use of AI may result in reputational harm or liability. We are building AI into many of our offerings, including our productivity services, and we are also making first- and third-party AI available for our customers to use in solutions that they build. We expect these elements of our business to grow. We envision a future in which AI operating in our devices, applications, and the cloud helps our customers be more productive in their work and personal lives. As with many innovations, AI presents risks and challenges that could affect its adoption, and therefore our business. AI algorithms may be flawed. Datasets may be insufficient or contain biased information. Ineffective or inadequate AI development or deployment practices by Microsoft or others could result in incidents that impair the acceptance of AI solutions or cause harm to individuals or society. These deficiencies and other failures of AI systems could subject us to competitive harm, regulatory action, legal liability, including under new proposed legislation regulating AI in jurisdictions such as the European Union ("EU"), and brand or reputational harm. Some AI scenarios present ethical issues. If we enable or offer AI solutions that are controversial because of their impact on human rights, privacy, employment, or other social, economic, or political issues, we may experience brand or reputational harm.

OPERATIONAL RISKS

We may have excessive outages, data losses, and disruptions of our online services if we fail to maintain an adequate operations infrastructure. Our increasing user traffic, growth in services, and the complexity of our products and services demand more computing power. We spend substantial amounts to build, purchase, or lease datacenters and equipment and to upgrade our technology and network infrastructure to handle more traffic on our websites and in our datacenters. Our datacenters depend on predictable energy and networking supplies, the cost or availability of which could be adversely affected by a variety of factors, including the transition to a clean energy economy and geopolitical disruptions. These demands continue to increase as we introduce new products and services and support the growth of existing services such as Bing, Azure, Microsoft Account services, Microsoft 365, Microsoft Teams, Dynamics 365, OneDrive, SharePoint Online, Skype, Xbox, and Outlook.com. We are rapidly growing our business of providing a platform and back-end hosting for services provided by third parties to their end users. Maintaining, securing, and expanding this infrastructure is expensive and complex, and requires development of principles for datacenter builds in geographies with higher safety risks. It requires that we maintain an Internet connectivity infrastructure and storage and compute capacity that is robust and reliable within competitive and regulatory constraints that continue to evolve. Inefficiencies or operational failures, including temporary or permanent loss of customer data, insufficient Internet connectivity, or inadequate storage and compute capacity, could diminish the quality of our products, services, and user experience resulting in contractual liability, claims by customers and other third parties, regulatory actions, damage to our reputation, and loss of current and potential users, subscribers, and advertisers, each of which may adversely impact our consolidated financial statements.

We may experience quality or supply problems. Our hardware products such as Xbox consoles, Surface devices, and other devices we design and market are highly complex and can have defects in design, manufacture, or associated software. We could incur significant expenses, lost revenue, and reputational harm as a result of recalls, safety alerts, or product liability claims if we fail to prevent, detect, or address such issues through design, testing, or warranty repairs.

Our software products and services also may experience quality or reliability problems. The highly sophisticated software we develop may contain bugs and other defects that interfere with their intended operation. Our customers increasingly rely on us for critical business functions and multiple workloads. Many of our products and services are interdependent with one another. Each of these circumstances potentially magnifies the impact of quality or reliability issues. Any defects we do not detect and fix in pre-release testing could cause reduced sales and revenue, damage to our reputation, repair or remediation costs, delays in the release of new products or versions, or legal liability. Although our license agreements typically contain provisions that eliminate or limit our exposure to liability, there is no assurance these provisions will withstand legal challenge.

There are limited suppliers for certain device and datacenter components. Our competitors use some of the same suppliers and their demand for hardware components can affect the capacity available to us. If components are delayed or become unavailable, whether because of supplier capacity constraint, industry shortages, legal or regulatory changes that restrict supply sources, or other reasons, we may not obtain timely replacement supplies, resulting in reduced sales or inadequate datacenter capacity. Component shortages, excess or obsolete inventory, or price reductions resulting in inventory adjustments may increase our cost of revenue. Xbox consoles, Surface devices, datacenter servers, and other hardware are assembled in Asia and other geographies that may be subject to disruptions in the supply chain, resulting in shortages that would affect our revenue and operating margins.

LEGAL, REGULATORY, AND LITIGATION RISKS

Government litigation and regulatory activity relating to competition rules may limit how we design and market our products. As a leading global software and device maker, government agencies closely scrutinize us under U.S. and foreign competition laws. Governments are actively enforcing competition laws and regulations, and this includes scrutiny in potentially large markets such as the EU, the U.S., and China. Some jurisdictions also allow competitors or consumers to assert claims of anti-competitive conduct. U.S. federal and state antitrust authorities have previously brought enforcement actions and continue to scrutinize our business.

The European Commission ("the Commission") closely scrutinizes the design of high-volume Microsoft products and the terms on which we make certain technologies used in these products, such as file formats, programming interfaces, and protocols, available to other companies. Flagship product releases such as Windows can receive significant scrutiny under competition laws. For example, in 2004, the Commission ordered us to create new versions of our Windows operating system that do not include certain multimedia technologies and to provide our competitors with specifications for how to implement certain proprietary Windows communications protocols in their own products. In 2009, the Commission accepted a set of commitments we offered to address the Commission's concerns relating to competition in web browsing software, including an undertaking to address Commission concerns relating to interoperability. The web browsing commitments expired in 2014. The remaining obligations may limit our ability to innovate in Windows or other products in the future, diminish the developer appeal of the Windows platform, and increase our product development costs. The availability of licenses related to protocols and file formats may enable competitors to develop software products that better mimic the functionality of our products, which could hamper sales of our products.

Our portfolio of first-party devices continues to grow; at the same time our OEM partners offer a large variety of devices for our platforms. As a result, increasingly we both cooperate and compete with our OEM partners, creating a risk that we fail to do so in compliance with competition rules. Regulatory scrutiny in this area may increase. Certain foreign governments, particularly in China and other countries in Asia, have advanced arguments under their competition laws that exert downward pressure on royalties for our intellectual property.

Government regulatory actions and court decisions such as these may result in fines or hinder our ability to provide the benefits of our software to consumers and businesses, reducing the attractiveness of our products and the revenue that comes from them. New competition law actions could be initiated, potentially using previous actions as precedent. The outcome of such actions, or steps taken to avoid them, could adversely affect us in a variety of ways, including:

- We may have to choose between withdrawing products from certain geographies to avoid fines or designing and developing alternative versions of those products to comply with government rulings, which may entail a delay in a product release and removing functionality that customers want or on which developers rely.
- We may be required to make available licenses to our proprietary technologies on terms that do not reflect their fair market value or do not protect our associated intellectual property.
- We are subject to a variety of ongoing commitments because of court or administrative orders, consent decrees, or other voluntary actions we have taken. If we fail to comply with these commitments, we may incur litigation costs and be subject to substantial fines or other remedial actions.
- Our ability to realize anticipated Windows post-sale monetization opportunities may be limited.
- Regulatory scrutiny may inhibit our ability to consummate acquisitions or impose conditions that reduce the ultimate value of such transactions.

Our global operations subject us to potential consequences under anti-corruption, trade, and other laws and regulations. The Foreign Corrupt Practices Act ("FCPA") and other anti-corruption laws and regulations ("Anti-Corruption Laws") prohibit corrupt payments by our employees, vendors, or agents, and the accounting provisions of the FCPA require us to maintain accurate books and records and adequate internal controls. From time to time, we receive inquiries from authorities in the U.S. and elsewhere which may be based on reports from employees and others about our business activities outside the U.S. and our compliance with Anti-Corruption Laws. Periodically, we receive such reports directly and investigate them, and also cooperate with investigations by U.S. and foreign law enforcement authorities. An example of increasing international regulatory complexity is the EU Whistleblower Directive, initiated in 2021, which may present compliance challenges to the extent it is implemented in different forms by EU member states. Most countries in which we operate also have competition laws that prohibit competitors from colluding or otherwise attempting to reduce competition between themselves. While we devote substantial resources to our U.S. and international compliance programs and have implemented policies, training, and internal controls designed to reduce the risk of corrupt payments and collusive activity, our employees, vendors, or agents may violate our policies. Our failure to comply with Anti-Corruption Laws or competition laws could result in significant fines and penalties, criminal sanctions against us, our officers, or our employees, prohibitions on the conduct of our business, and damage to our reputation.

Increasing trade laws, policies, sanctions, and other regulatory requirements also affect our operations in and outside the U.S. relating to trade and investment. Economic sanctions in the U.S., the EU, and other countries prohibit most business with restricted entities or countries such as Crimea, Cuba, Iran, North Korea, and Syria. U.S. export controls restrict Microsoft from offering many of its products and services to, or making investments in, certain entities in specified countries. U.S. import controls restrict us from integrating certain information and communication technologies into our supply chain and allow for government review of transactions involving information and communications technology from countries determined to be foreign adversaries. Periods of intense diplomatic or armed conflict, such as the ongoing conflict in Ukraine, may result in (1) new and rapidly evolving sanctions and trade restrictions, which may impair trade with sanctioned individuals and countries, and (2) negative impacts to regional trade ecosystems among our customers, partners, and us. Non-compliance with sanctions as well as general ecosystem disruptions could result in reputational harm, operational delays, monetary fines, loss of revenues, increased costs, loss of export privileges, or criminal sanctions.

Other regulatory areas that may apply to our products and online services offerings include requirements related to user privacy, telecommunications, data storage and protection, advertising, and online content. For example, some regulators are taking the position that our offerings such as Microsoft Teams and Skype are covered by existing laws regulating telecommunications services, and some new laws, including EU Member State laws under the European Electronic Communications Code, are defining more of our services as regulated telecommunications services. This trend may continue and will result in these offerings being subjected to additional data protection, security, and law enforcement surveillance obligations. Regulators may assert that our collection, use, and management of customer data and other information is inconsistent with their laws and regulations, including laws that apply to the tracking of users via technology such as cookies. Legislative or regulatory action relating to cybersecurity requirements may increase the costs to develop, implement, or secure our products and services. Legislative and regulatory action is emerging in the areas of AI and content moderation, which could increase costs or restrict opportunity. Applying these laws and regulations to our business is often unclear, subject to change over time, and sometimes may conflict from jurisdiction to jurisdiction. Additionally, these laws and governments' approach to their enforcement, and our products and services, are continuing to evolve. Compliance with these types of regulation may involve significant costs or require changes in products or business practices that result in reduced revenue. Noncompliance could result in the imposition of penalties or orders we stop the alleged noncompliant activity.

We strive to empower all people and organizations to achieve more, and accessibility of our products is an important aspect of this goal. There is increasing pressure from advocacy groups, regulators, competitors, customers, and other stakeholders to make technology more accessible. If our products do not meet customer expectations or global accessibility requirements, we could lose sales opportunities or face regulatory or legal actions.

Laws and regulations relating to the handling of personal data may impede the adoption of our services or result in increased costs, legal claims, fines against us, or reputational damage. The growth of our Internet- and cloud-based services internationally relies increasingly on the movement of data across national boundaries. Legal requirements relating to the collection, storage, handling, and transfer of personal data continue to evolve. For example, in July 2020 the Court of Justice of the EU invalidated a framework called Privacy Shield for companies to transfer data from EU member states to the United States. This ruling continues to generate uncertainty about the legal requirements for data transfers from the EU under other legal mechanisms and has resulted in some EU data protection authorities blocking the use of U.S.-based services that involve the transfer of data to the U.S. The U.S. and the EU in March 2022 agreed in principle on a replacement framework for the Privacy Shield, called the Trans-Atlantic Data Privacy Framework. A failure of the U.S. and EU to finalize the Trans-Atlantic Data Privacy Framework could compound that uncertainty and result in additional blockages of data transfers. Potential new rules and restrictions on the flow of data across borders could increase the cost and complexity of delivering our products and services in some markets. For example, the EU General Data Protection Regulation ("GDPR") applies to all of our activities conducted from an establishment in the EU or related to products and services offered in the EU, imposes a range of compliance obligations regarding the handling of personal data. More recently, the EU has been developing new requirements related to the use of data, including in the Digital Markets Act, the Digital Services Act, and the Data Act, that will add additional rules and restriction on the use of data in our products and services. Engineering efforts to build and maintain capabilities to facilitate compliance with these laws involve substantial expense and the diversion of engineering resources from other projects. We might experience reduced demand for our offerings if we are unable to engineer products that meet our legal duties or help our customers meet their obligations under the GDPR and other data regulations, or if our implementation to comply with the GDPR makes our offerings less attractive. Compliance with these obligations depends in part on how particular regulators interpret and apply them. If we fail to comply, or if regulators assert we have failed to comply (including in response to complaints made by customers), it may lead to regulatory enforcement actions, which can result in monetary penalties (of up to 4% of worldwide revenue in the case of GDPR), private lawsuits, reputational damage, blockage of international data transfers, and loss of customers. The highest fines assessed under GDPR have recently been increasing, especially against large technology companies. Jurisdictions around the world, such as China, India, and states in the U.S. have adopted, or are considering adopting or expanding, laws and regulations imposing obligations regarding the handling or transfer of personal data.

The Company's investment in gaining insights from data is becoming central to the value of the services we deliver to customers, to our operational efficiency and key opportunities in monetization, customer perceptions of quality, and operational efficiency. Our ability to use data in this way may be constrained by regulatory developments that impede realizing the expected return from this investment. Ongoing legal analyses, reviews, and inquiries by regulators of Microsoft practices, or relevant practices of other organizations, may result in burdensome or inconsistent requirements, including data sovereignty and localization requirements, affecting the location, movement, collection, and use of our customer and internal employee data as well as the management of that data. Compliance with applicable laws and regulations regarding personal data may require changes in services, business practices, or internal systems that result in increased costs, lower revenue, reduced efficiency, or greater difficulty in competing with foreign-based firms. Compliance with data regulations might limit our ability to innovate or offer certain features and functionality in some jurisdictions where we operate. Failure to comply with existing or new rules may result in significant penalties or orders to stop the alleged noncompliant activity, as well as negative publicity and diversion of management time and effort.

We have claims and lawsuits against us that may result in adverse outcomes. We are subject to a variety of claims and lawsuits. These claims may arise from a wide variety of business practices and initiatives, including major new product releases such as Windows, significant business transactions, warranty or product claims, and employment practices. Adverse outcomes in some or all of these claims may result in significant monetary damages or injunctive relief that could adversely affect our ability to conduct our business. The litigation and other claims are subject to inherent uncertainties and management's view of these matters may change in the future. A material adverse impact in our consolidated financial statements could occur for the period in which the effect of an unfavorable outcome becomes probable and reasonably estimable.

Our business with government customers may present additional uncertainties. We derive substantial revenue from government contracts. Government contracts generally can present risks and challenges not present in private commercial agreements. For instance, we may be subject to government audits and investigations relating to these contracts, we could be suspended or debarred as a governmental contractor, we could incur civil and criminal fines and penalties, and under certain circumstances contracts may be rescinded. Some agreements may allow a government to terminate without cause and provide for higher liability limits for certain losses. Some contracts may be subject to periodic funding approval, reductions, or delays which could adversely impact public-sector demand for our products and services. These events could negatively impact our results of operations, financial condition, and reputation.

We may have additional tax liabilities. We are subject to income taxes in the U.S. and many foreign jurisdictions. Significant judgment is required in determining our worldwide provision for income taxes. In the course of our business, there are many transactions and calculations where the ultimate tax determination is uncertain. For example, compliance with the 2017 United States Tax Cuts and Jobs Act ("TCJA") and possible future legislative changes may require the collection of information not regularly produced within the Company, the use of estimates in our consolidated financial statements, and the exercise of significant judgment in accounting for its provisions. As regulations and guidance evolve with respect to the TCJA or possible future legislative changes, and as we gather more information and perform more analysis, our results may differ from previous estimates and may materially affect our consolidated financial statements.

We regularly are under audit by tax authorities in different jurisdictions. Although we believe that our provision for income taxes and our tax estimates are reasonable, tax authorities may disagree with certain positions we have taken. In addition, economic and political pressures to increase tax revenue in various jurisdictions may make resolving tax disputes favorably more difficult. We are currently under Internal Revenue Service audit for prior tax years, with the primary unresolved issues relating to transfer pricing. The final resolution of those audits, and other audits or litigation, may differ from the amounts recorded in our consolidated financial statements and may materially affect our consolidated financial statements in the period or periods in which that determination is made.

We earn a significant amount of our operating income outside the U.S. A change in the mix of earnings and losses in countries with differing statutory tax rates, changes in our business or structure, or the expiration of or disputes about certain tax agreements in a particular country may result in higher effective tax rates for the Company. In addition, changes in U.S. federal and state or international tax laws applicable to corporate multinationals, other fundamental law changes currently being considered by many countries, including in the U.S., and changes in taxing jurisdictions' administrative interpretations, decisions, policies, and positions may materially adversely impact our consolidated financial statements.

INTELLECTUAL PROPERTY RISKS

We may not be able to protect our source code from copying if there is an unauthorized disclosure. Source code, the detailed program commands for our operating systems and other software programs, is critical to our business. Although we license portions of our application and operating system source code to several licensees, we take significant measures to protect the secrecy of large portions of our source code. If our source code leaks, we might lose future trade secret protection for that code. It may then become easier for third parties to compete with our products by copying functionality, which could adversely affect our revenue and operating margins. Unauthorized disclosure of source code also could increase the security risks described elsewhere in these risk factors.

Legal changes, our evolving business model, piracy, and other factors may decrease the value of our intellectual property. Protecting our intellectual property rights and combating unlicensed copying and use of our software and other intellectual property on a global basis is difficult. While piracy adversely affects U.S. revenue, the impact on revenue from outside the U.S. is more significant, particularly countries in which the legal system provides less protection for intellectual property rights. Our revenue in these markets may grow more slowly than the underlying device market. Similarly, the absence of harmonized patent laws makes it more difficult to ensure consistent respect for patent rights. Throughout the world, we educate users about the benefits of licensing genuine products and obtaining indemnification benefits for intellectual property risks, and we educate lawmakers about the advantages of a business climate where intellectual property rights are protected. Reductions in the legal protection for software intellectual property rights could adversely affect revenue.

We expend significant resources to patent the intellectual property we create with the expectation that we will generate revenues by incorporating that intellectual property in our products or services or, in some instances, by licensing or cross-licensing our patents to others in return for a royalty and/or increased freedom to operate. Changes in the law may continue to weaken our ability to prevent the use of patented technology or collect revenue for licensing our patents. These include legislative changes and regulatory actions that make it more difficult to obtain injunctions, and the increasing use of legal process to challenge issued patents. Similarly, licensees of our patents may fail to satisfy their obligations to pay us royalties or may contest the scope and extent of their obligations. The royalties we can obtain to monetize our intellectual property may decline because of the evolution of technology, price changes in products using licensed patents, greater value from cross-licensing, or the difficulty of discovering infringements. Finally, our increasing engagement with open source software will also cause us to license our intellectual property rights broadly in certain situations and may negatively impact revenue.

Third parties may claim we infringe their intellectual property rights. From time to time, others claim we infringe their intellectual property rights. The number of these claims may grow because of constant technological change in the markets in which we compete, the extensive patent coverage of existing technologies, the rapid rate of issuance of new patents, and our offering of first-party devices, such as Surface. To resolve these claims, we may enter into royalty and licensing agreements on terms that are less favorable than currently available, stop selling or redesign affected products or services, or pay damages to satisfy indemnification commitments with our customers. These outcomes may cause operating margins to decline. Besides money damages, in some jurisdictions plaintiffs can seek injunctive relief that may limit or prevent importing, marketing, and selling our products or services that have infringing technologies. In some countries, such as Germany, an injunction can be issued before the parties have fully litigated the validity of the underlying patents. We have paid significant amounts to settle claims related to the use of technology and intellectual property rights and to procure intellectual property rights as part of our strategy to manage this risk, and may continue to do so.

GENERAL RISKS

If our reputation or our brands are damaged, our business and operating results may be harmed . Our reputation and brands are globally recognized and are important to our business. Our reputation and brands affect our ability to attract and retain consumer, business, and public-sector customers. There are numerous ways our reputation or brands could be damaged. These include product safety or quality issues, our environmental impact and sustainability, supply chain practices, or human rights record. We may experience backlash from customers, government entities, advocacy groups, employees, and other stakeholders that disagree with our product offering decisions or public policy positions. Damage to our reputation or our brands may occur from, among other things:

- The introduction of new features, products, services, or terms of service that customers, users, or partners do not like.

- Public scrutiny of our decisions regarding user privacy, data practices, or content.
- Data security breaches, compliance failures, or actions of partners or individual employees.

The proliferation of social media may increase the likelihood, speed, and magnitude of negative brand events. If our brands or reputation are damaged, it could negatively impact our revenues or margins, or ability to attract the most highly qualified employees.

Adverse economic or market conditions may harm our business. Worsening economic conditions, including inflation, recession, pandemic, or other changes in economic conditions, may cause lower IT spending and adversely affect our revenue. If demand for PCs, servers, and other computing devices declines, or consumer or business spending for those products declines, our revenue will be adversely affected.

Our product distribution system relies on an extensive partner and retail network. OEMs building devices that run our software have also been a significant means of distribution. The impact of economic conditions on our partners, such as the bankruptcy of a major distributor, OEM, or retailer, could cause sales channel disruption.

Challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, allowances for doubtful accounts and write-offs of accounts receivable may increase.

We maintain an investment portfolio of various holdings, types, and maturities. These investments are subject to general credit, liquidity, market, and interest rate risks, which may be exacerbated by market downturns or events that affect global financial markets. A significant part of our investment portfolio comprises U.S. government securities. If global financial markets decline for long periods, or if there is a downgrade of the U.S. government credit rating due to an actual or threatened default on government debt, our investment portfolio may be adversely affected and we could determine that more of our investments have experienced a decline in fair value, requiring impairment charges that could adversely affect our consolidated financial statements.

Catastrophic events or geopolitical conditions may disrupt our business. A disruption or failure of our systems or operations because of a major earthquake, weather event, cyberattack, terrorist attack, pandemic, or other catastrophic event could cause delays in completing sales, providing services, or performing other critical functions. Our corporate headquarters, a significant portion of our research and development activities, and certain other essential business operations are in the Seattle, Washington area, and we have other business operations in the Silicon Valley area of California, both of which are seismically active regions. A catastrophic event that results in the destruction or disruption of any of our critical business or IT systems, or the infrastructure or systems they rely on, such as power grids, could harm our ability to conduct normal business operations. Providing our customers with more services and solutions in the cloud puts a premium on the resilience of our systems and strength of our business continuity management plans and magnifies the potential impact of prolonged service outages in our consolidated financial statements.

Abrupt political change, terrorist activity, and armed conflict, such as the ongoing conflict in Ukraine, pose a risk of general economic disruption in affected countries, which may increase our operating costs and negatively impact our ability to sell to and collect from customers in affected markets. These conditions also may add uncertainty to the timing and budget for technology investment decisions by our customers and may cause supply chain disruptions for hardware manufacturers. Geopolitical change may result in changing regulatory systems and requirements and market interventions that could impact our operating strategies, access to national, regional, and global markets, hiring, and profitability. Geopolitical instability may lead to sanctions and impact our ability to do business in some markets or with some public-sector customers. Any of these changes may negatively impact our revenues.

The occurrence of regional epidemics or a global pandemic such as COVID-19 may adversely affect our operations, financial condition, and results of operations. The COVID-19 pandemic has had widespread, rapidly evolving, and unpredictable impacts on global society, economies, financial markets, and business practices. The extent to which global pandemics impact our business going forward will depend on factors such as the duration and scope of the pandemic; governmental, business, and individuals' actions in response to the pandemic; and the impact on economic activity including the possibility of recession or financial market instability.

Measures to contain a global pandemic may intensify other risks described in these Risk Factors. Any of these measures may adversely impact our ability to:

- Maintain our operations infrastructure, including the reliability and adequate capacity of cloud services.
- Satisfy our contractual and regulatory compliance obligations as we adapt to changing usage patterns, such as through datacenter load balancing.
- Ensure a high-quality and consistent supply chain and manufacturing operations for our hardware devices and datacenter operations.
- Effectively manage our international operations through changes in trade practices and policies.
- Hire and deploy people where we most need them.
- Sustain the effectiveness and productivity of our operations including our sales, marketing, engineering, and distribution functions.

We may incur increased costs to effectively manage these aspects of our business. If we are unsuccessful it may adversely impact our revenues, cash flows, market share growth, and reputation.

The long-term effects of climate change on the global economy and the IT industry in particular are unclear. Environmental regulations or changes in the supply, demand or available sources of energy or other resources may affect the availability or cost of goods and services, including natural resources, necessary to run our business. Changes in climate where we operate may increase the costs of powering and cooling computer hardware we use to develop software and provide cloud-based services.

Our global business exposes us to operational and economic risks. Our customers are located throughout the world and a significant part of our revenue comes from international sales. The global nature of our business creates operational, economic, and geopolitical risks. Our results of operations may be affected by global, regional, and local economic developments, monetary policy, inflation, and recession, as well as political and military disputes. In addition, our international growth strategy includes certain markets, the developing nature of which presents several risks, including deterioration of social, political, labor, or economic conditions in a country or region, and difficulties in staffing and managing foreign operations. Emerging nationalist and protectionist trends and concerns about human rights and political expression in specific countries may significantly alter the trade and commercial environments. Changes to trade policy or agreements as a result of populism, protectionism, or economic nationalism may result in higher tariffs, local sourcing initiatives, and non-local sourcing restrictions, export controls, investment restrictions, or other developments that make it more difficult to sell our products in foreign countries. Disruptions of these kinds in developed or emerging markets could negatively impact demand for our products and services or increase operating costs. Although we hedge a portion of our international currency exposure, significant fluctuations in foreign exchange rates between the U.S. dollar and foreign currencies may adversely affect our results of operations.

Our business depends on our ability to attract and retain talented employees. Our business is based on successfully attracting and retaining talented employees representing diverse backgrounds, experiences, and skill sets. The market for highly skilled workers and leaders in our industry is extremely competitive. Maintaining our brand and reputation, as well as a diverse and inclusive work environment that enables all our employees to thrive, are important to our ability to recruit and retain employees. We are also limited in our ability to recruit internationally by restrictive domestic immigration laws. Changes to U.S. immigration policies that restrain the flow of technical and professional talent may inhibit our ability to adequately staff our research and development efforts. If we are less successful in our recruiting efforts, or if we cannot retain highly skilled workers and key leaders, our ability to develop and deliver successful products and services may be adversely affected. Effective succession planning is also important to our long-term success. Failure to ensure effective transfer of knowledge and smooth transitions involving key employees could hinder our strategic planning and execution. How employment-related laws are interpreted and applied to our workforce practices may result in increased operating costs and less flexibility in how we meet our workforce needs. Our global workforce is primarily non-unionized, but we have several unions and works councils outside of the United States. In the U.S., there has been a general increase in workers exercising their right to form or join a union. While Microsoft has not received such petitions in the U.S., the unionization of significant employee populations could result in higher costs and other operational changes necessary to respond to changing conditions and to establish new relationships with worker representatives.

ITEM 1B. UNRESOLVED STAFF COMMENTS

We have received no written comments regarding our periodic or current reports from the staff of the Securities and Exchange Commission that were issued 180 days or more preceding the end of our fiscal year 2022 that remain unresolved.

ITEM 2. PROPERTIES

Our corporate headquarters are located in Redmond, Washington. We have approximately 15 million square feet of space located in King County, Washington that is used for engineering, sales, marketing, and operations, among other general and administrative purposes. These facilities include approximately 10 million square feet of owned space situated on approximately 520 acres of land we own at our corporate headquarters, and approximately 5 million square feet of space we lease. In addition, we own and lease space domestically that includes office and datacenter space.

We also own and lease facilities internationally for datacenters, research and development, and other operations. The largest owned properties include space in the following locations: China, India, Ireland, the Netherlands, and Singapore. The largest leased properties include space in the following locations: Australia, Canada, China, France, Germany, India, Ireland, Israel, Japan, the Netherlands, and the United Kingdom.

In addition to the above locations, we have various product development facilities, both domestically and internationally, as described under Research and Development (Part I, Item 1 of this Form 10-K).

The table below shows a summary of the square footage of our office, datacenter, and other facilities owned and leased domestically and internationally as of June 30, 2022:

(Square feet in millions)

Location	Owned	Leased	Total
U.S.	25	19	44
International	8	21	29
Total	33	40	73

ITEM 3. LEGAL PROCEEDINGS

Refer to Note 15 – Contingencies of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for information regarding legal proceedings in which we are involved.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS, AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET AND STOCKHOLDERS

Our common stock is traded on the NASDAQ Stock Market under the symbol MSFT. On July 25, 2022, there were 86,465 registered holders of record of our common stock.

SHARE REPURCHASES AND DIVIDENDS

Following are our monthly share repurchases for the fourth quarter of fiscal year 2022:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Plans or Programs
				(In millions)
April 1, 2022 – April 30, 2022	9,124,963	\$ 289.34	9,124,963	\$ 45,869
May 1, 2022 – May 31, 2022	9,809,727	265.95	9,809,727	43,260
June 1, 2022 – June 30, 2022	9,832,841	259.42	9,832,841	40,709
	28,767,531		28,767,531	

All share repurchases were made using cash resources. Our share repurchases may occur through open market purchases or pursuant to a Rule 10b5-1 trading plan. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards.

Our Board of Directors declared the following dividends during the fourth quarter of fiscal year 2022:

Declaration Date	Record Date	Payment Date	Dividend Per Share	Amount
				(In millions)
June 14, 2022	August 18, 2022	September 8, 2022	\$ 0.62	\$ 4,627

We returned \$12.4 billion to shareholders in the form of share repurchases and dividends in the fourth quarter of fiscal year 2022. Refer to Note 16 – Stockholders' Equity of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion regarding share repurchases and dividends.

ITEM 6. [RESERVED]

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to help the reader understand the results of operations and financial condition of Microsoft Corporation. MD&A is provided as a supplement to, and should be read in conjunction with, our consolidated financial statements and the accompanying Notes to Financial Statements (Part II, Item 8 of this Form 10-K). This section generally discusses the results of our operations for the year ended June 30, 2022 compared to the year ended June 30, 2021. For a discussion of the year ended June 30, 2021 compared to the year ended June 30, 2020, please refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report on Form 10-K for the year ended June 30, 2021.

OVERVIEW

Microsoft is a technology company whose mission is to empower every person and every organization on the planet to achieve more. We strive to create local opportunity, growth, and impact in every country around the world. Our platforms and tools help drive small business productivity, large business competitiveness, and public-sector efficiency. They also support new startups, improve educational and health outcomes, and empower human ingenuity.

We generate revenue by offering a wide range of cloud-based and other services to people and businesses; licensing and supporting an array of software products; designing, manufacturing, and selling devices; and delivering relevant online advertising to a global audience. Our most significant expenses are related to compensating employees; designing, manufacturing, marketing, and selling our products and services; datacenter costs in support of our cloud-based services; and income taxes.

Highlights from fiscal year 2022 compared with fiscal year 2021 included:

- Microsoft Cloud (formerly commercial cloud) revenue increased 32% to \$91.2 billion.
- Office Commercial products and cloud services revenue increased 13% driven by Office 365 Commercial growth of 18%.
- Office Consumer products and cloud services revenue increased 11% and Microsoft 365 Consumer subscribers grew to 59.7 million.
- LinkedIn revenue increased 34%.
- Dynamics products and cloud services revenue increased 25% driven by Dynamics 365 growth of 39%.
- Server products and cloud services revenue increased 28% driven by Azure and other cloud services growth of 45%.
- Windows original equipment manufacturer licensing ("Windows OEM") revenue increased 11%.
- Windows Commercial products and cloud services revenue increased 11%.
- Xbox content and services revenue increased 3%.
- Search and news advertising revenue excluding traffic acquisition costs increased 27%.
- Surface revenue increased 3%.

On March 4, 2022, we completed our acquisition of Nuance Communications, Inc. ("Nuance") for a total purchase price of \$18.8 billion, consisting primarily of cash. Nuance is a cloud and artificial intelligence ("AI") software provider with healthcare and enterprise AI experience, and the acquisition will build on our industry-specific cloud offerings. The financial results of Nuance have been included in our consolidated financial statements since the date of the acquisition. Nuance is reported as part of our Intelligent Cloud segment. Refer to Note 8 – Business Combinations of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

Industry Trends

Our industry is dynamic and highly competitive, with frequent changes in both technologies and business models. Each industry shift is an opportunity to conceive new products, new technologies, or new ideas that can further transform the industry and our business. At Microsoft, we push the boundaries of what is possible through a broad range of research and development activities that seek to identify and address the changing demands of customers and users, industry trends, and competitive forces.

Economic Conditions, Challenges, and Risks

The markets for software, devices, and cloud-based services are dynamic and highly competitive. Our competitors are developing new software and devices, while also deploying competing cloud-based services for consumers and businesses. The devices and form factors customers prefer evolve rapidly, and influence how users access services in the cloud, and in some cases, the user's choice of which suite of cloud-based services to use. We must continue to evolve and adapt over an extended time in pace with this changing environment. The investments we are making in infrastructure and devices will continue to increase our operating costs and may decrease our operating margins.

Our success is highly dependent on our ability to attract and retain qualified employees. We hire a mix of university and industry talent worldwide. We compete for talented individuals globally by offering an exceptional working environment, broad customer reach, scale in resources, the ability to grow one's career across many different products and businesses, and competitive compensation and benefits. Aggregate demand for our software, services, and devices is correlated to global macroeconomic and geopolitical factors, which remain dynamic.

Our devices are primarily manufactured by third-party contract manufacturers, some of which contain certain components for which there are very few qualified suppliers. For these components, we have limited near-term flexibility to use other manufacturers if a current vendor becomes unavailable or is unable to meet our requirements. Extended disruptions at these suppliers and/or manufacturers could lead to a similar disruption in our ability to manufacture devices on time to meet consumer demand.

Our international operations provide a significant portion of our total revenue and expenses. Many of these revenue and expenses are denominated in currencies other than the U.S. dollar. As a result, changes in foreign exchange rates may significantly affect revenue and expenses. Fluctuations in the U.S. dollar relative to certain foreign currencies did not have a material impact on reported revenue or expenses from our international operations in fiscal year 2022.

Refer to Risk Factors (Part I, Item 1A of this Form 10-K) for a discussion of these factors and other risks.

Seasonality

Our revenue fluctuates quarterly and is generally higher in the second and fourth quarters of our fiscal year. Second quarter revenue is driven by corporate year-end spending trends in our major markets and holiday season spending by consumers, and fourth quarter revenue is driven by the volume of multi-year on-premises contracts executed during the period.

Reportable Segments

We report our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing. The segment amounts included in MD&A are presented on a basis consistent with our internal management reporting. Additional information on our reportable segments is contained in Note 19 – Segment Information and Geographic Data of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K).

Metrics

We use metrics in assessing the performance of our business and to make informed decisions regarding the allocation of resources. We disclose metrics to enable investors to evaluate progress against our ambitions, provide transparency into performance trends, and reflect the continued evolution of our products and services. Our commercial and other business metrics are fundamentally connected based on how customers use our products and services. The metrics are disclosed in the MD&A or the Notes to Financial Statements (Part II, Item 8 of this Form 10-K). Financial metrics are calculated based on financial results prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"), and growth comparisons relate to the corresponding period of last fiscal year.

In the first quarter of fiscal year 2022, we made updates to the presentation and method of calculation for certain metrics, most notably changes to incorporate all current and anticipated revenue streams within our Office Consumer and Server products and cloud services metrics and changes to align with how we manage our Windows OEM and Search and news advertising businesses. None of these changes had a material impact on previously reported amounts in our MD&A.

In the third quarter of fiscal year 2022, we completed our acquisition of Nuance. Nuance is included in all commercial metrics and our Server products and cloud services revenue growth metric. Azure and other cloud services revenue includes Nuance cloud services, and Server products revenue includes Nuance on-premises offerings.

Commercial

Our commercial business primarily consists of Server products and cloud services, Office Commercial, Windows Commercial, the commercial portion of LinkedIn, Enterprise Services, and Dynamics. Our commercial metrics allow management and investors to assess the overall health of our commercial business and include leading indicators of future performance.

Commercial remaining performance obligation	Commercial portion of revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods
Microsoft Cloud revenue	Revenue from Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties
Microsoft Cloud gross margin percentage	Gross margin percentage for our Microsoft Cloud business

Productivity and Business Processes and Intelligent Cloud

Metrics related to our Productivity and Business Processes and Intelligent Cloud segments assess the health of our core businesses within these segments. The metrics reflect our cloud and on-premises product strategies and trends.

Office Commercial products and cloud services revenue growth	Revenue from Office Commercial products and cloud services (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, and Microsoft Viva
Office Consumer products and cloud services revenue growth	Revenue from Office Consumer products and cloud services, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services
Office 365 Commercial seat growth	The number of Office 365 Commercial seats at end of period where seats are paid users covered by an Office 365 Commercial subscription
Microsoft 365 Consumer subscribers	The number of Microsoft 365 Consumer subscribers at end of period
Dynamics products and cloud services revenue growth	Revenue from Dynamics products and cloud services, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM, Customer Insights, Power Apps, and Power Automate; and on-premises ERP and CRM applications
LinkedIn revenue growth	Revenue from LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions
Server products and cloud services revenue growth	Revenue from Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses ("CALs"); and Nuance and GitHub

More Personal Computing

Metrics related to our More Personal Computing segment assess the performance of key lines of business within this segment. These metrics provide strategic product insights which allow us to assess the performance across our commercial and consumer businesses. As we have diversity of target audiences and sales motions within the Windows business, we monitor metrics that are reflective of those varying motions.

Windows OEM revenue growth	Revenue from sales of Windows Pro and non-Pro licenses sold through the OEM channel
Windows Commercial products and cloud services revenue growth	Revenue from Windows Commercial products and cloud services, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings
Surface revenue growth	Revenue from Surface devices and accessories
Xbox content and services revenue growth	Revenue from Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, third-party disc royalties, advertising, and other cloud services
Search and news advertising revenue, excluding TAC, growth	Revenue from search and news advertising excluding traffic acquisition costs ("TAC") paid to Bing Ads network publishers and news partners

SUMMARY RESULTS OF OPERATIONS

(In millions, except percentages and per share amounts)	2022	2021	Percentage Change
Revenue	\$ 198,270	\$ 168,088	18%
Gross margin	135,620	115,856	17%
Operating income	83,383	69,916	19%
Net income	72,738	61,271	19%
Diluted earnings per share	9.65	8.05	20%
Adjusted net income (non-GAAP)	69,447	60,651	15%
Adjusted diluted earnings per share (non-GAAP)	9.21	7.97	16%

Adjusted net income and adjusted diluted earnings per share ("EPS") are non-GAAP financial measures which exclude the net income tax benefit related to transfer of intangible properties in the first quarter of fiscal year 2022 and the net income tax benefit related to an India Supreme Court decision on withholding taxes in the third quarter of fiscal year 2021. Refer to the Non-GAAP Financial Measures section below for a reconciliation of our financial results reported in accordance with GAAP to non-GAAP financial results. See Note 12 – Income Taxes of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

Fiscal Year 2022 Compared with Fiscal Year 2021

Revenue increased \$30.2 billion or 18% driven by growth across each of our segments. Intelligent Cloud revenue increased driven by Azure and other cloud services. Productivity and Business Processes revenue increased driven by Office 365 Commercial and LinkedIn. More Personal Computing revenue increased driven by Search and news advertising and Windows.

Cost of revenue increased \$10.4 billion or 20% driven by growth in Microsoft Cloud.

Gross margin increased \$19.8 billion or 17% driven by growth across each of our segments.

- Gross margin percentage decreased slightly. Excluding the impact of the fiscal year 2021 change in accounting estimate for the useful lives of our server and network equipment, gross margin percentage increased 1 point driven by improvement in Productivity and Business Processes.
- Microsoft Cloud gross margin percentage decreased slightly to 70%. Excluding the impact of the change in accounting estimate, Microsoft Cloud gross margin percentage increased 3 points driven by improvement across our cloud services, offset in part by sales mix shift to Azure and other cloud services.

Operating expenses increased \$6.3 billion or 14% driven by investments in cloud engineering, LinkedIn, Gaming, and commercial sales.

Key changes in operating expenses were:

- Research and development expenses increased \$3.8 billion or 18% driven by investments in cloud engineering, Gaming, and LinkedIn.
- Sales and marketing expenses increased \$1.7 billion or 8% driven by investments in commercial sales and LinkedIn. Sales and marketing included a favorable foreign currency impact of 2%.
- General and administrative expenses increased \$793 million or 16% driven by investments in corporate functions.

Operating income increased \$13.5 billion or 19% driven by growth across each of our segments.

Current year net income and diluted EPS were positively impacted by the net tax benefit related to the transfer of intangible properties, which resulted in an increase to net income and diluted EPS of \$3.3 billion and \$0.44, respectively. Prior year net income and diluted EPS were positively impacted by the net tax benefit related to the India Supreme Court decision on withholding taxes, which resulted in an increase to net income and diluted EPS of \$620 million and \$0.08, respectively.

Gross margin and operating income both included an unfavorable foreign currency impact of 2%.

SEGMENT RESULTS OF OPERATIONS

(In millions, except percentages)	2022	2021	Percentage Change
Revenue			
Productivity and Business Processes	\$ 63,364	\$ 53,915	18%
Intelligent Cloud	75,251	60,080	25%
More Personal Computing	59,655	54,093	10%
Total	<u>\$ 198,270</u>	<u>\$ 168,088</u>	18%
Operating Income			
Productivity and Business Processes	\$ 29,687	\$ 24,351	22%
Intelligent Cloud	32,721	26,126	25%
More Personal Computing	20,975	19,439	8%
Total	<u>\$ 83,383</u>	<u>\$ 69,916</u>	19%

Reportable Segments

Fiscal Year 2022 Compared with Fiscal Year 2021

Productivity and Business Processes

Revenue increased \$9.4 billion or 18%.

- Office Commercial products and cloud services revenue increased \$4.4 billion or 13%. Office 365 Commercial revenue grew 18% driven by seat growth of 14%, with continued momentum in small and medium business and frontline worker offerings, as well as growth in revenue per user. Office Commercial products revenue declined 22% driven by continued customer shift to cloud offerings.
- Office Consumer products and cloud services revenue increased \$641 million or 11% driven by Microsoft 365 Consumer subscription revenue. Microsoft 365 Consumer subscribers grew 15% to 59.7 million.
- LinkedIn revenue increased \$3.5 billion or 34% driven by a strong job market in our Talent Solutions business and advertising demand in our Marketing Solutions business.
- Dynamics products and cloud services revenue increased 25% driven by Dynamics 365 growth of 39%.

Operating income increased \$5.3 billion or 22%.

- Gross margin increased \$7.3 billion or 17% driven by growth in Office 365 Commercial and LinkedIn. Gross margin percentage was relatively unchanged. Excluding the impact of the change in accounting estimate, gross margin percentage increased 2 points driven by improvement across all cloud services.
- Operating expenses increased \$2.0 billion or 11% driven by investments in LinkedIn and cloud engineering.

Gross margin and operating income both included an unfavorable foreign currency impact of 2%.

Intelligent Cloud

Revenue increased \$15.2 billion or 25%.

- Server products and cloud services revenue increased \$14.7 billion or 28% driven by Azure and other cloud services. Azure and other cloud services revenue grew 45% driven by growth in our consumption-based services. Server products revenue increased 5% driven by hybrid solutions, including Windows Server and SQL Server running in multi-cloud environments.
- Enterprise Services revenue increased \$464 million or 7% driven by growth in Enterprise Support Services.

Operating income increased \$6.6 billion or 25%.

- Gross margin increased \$9.4 billion or 22% driven by growth in Azure and other cloud services. Gross margin percentage decreased. Excluding the impact of the change in accounting estimate, gross margin percentage was relatively unchanged driven by improvement in Azure and other cloud services, offset in part by sales mix shift to Azure and other cloud services.
- Operating expenses increased \$2.8 billion or 16% driven by investments in Azure and other cloud services.

Revenue and operating income included an unfavorable foreign currency impact of 2% and 3%, respectively.

More Personal Computing

Revenue increased \$5.6 billion or 10%.

- Windows revenue increased \$2.3 billion or 10% driven by growth in Windows OEM and Windows Commercial. Windows OEM revenue increased 11% driven by continued strength in the commercial PC market, which has higher revenue per license. Windows Commercial products and cloud services revenue increased 11% driven by demand for Microsoft 365.
- Search and news advertising revenue increased \$2.3 billion or 25%. Search and news advertising revenue excluding traffic acquisition costs increased 27% driven by higher revenue per search and search volume.
- Gaming revenue increased \$860 million or 6% on a strong prior year comparable that benefited from Xbox Series X|S launches and stay-at-home scenarios, driven by growth in Xbox hardware and Xbox content and services. Xbox hardware revenue increased 16% due to continued demand for Xbox Series X|S. Xbox content and services revenue increased 3% driven by growth in Xbox Game Pass subscriptions and first-party content, offset in part by a decline in third-party content.
- Surface revenue increased \$226 million or 3%.

Operating income increased \$1.5 billion or 8%.

- Gross margin increased \$3.1 billion or 10% driven by growth in Windows and Search and news advertising. Gross margin percentage was relatively unchanged.
- Operating expenses increased \$1.5 billion or 14% driven by investments in Gaming, Search and news advertising, and Windows marketing.

OPERATING EXPENSES

Research and Development

(In millions, except percentages)		2022		2021	Percentage Change
Research and development	\$	24,512	\$	20,716	18%
As a percent of revenue		12%		12%	0ppt

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs, localization costs incurred to translate software for international markets, and the amortization of purchased software code and services content.

Research and development expenses increased \$3.8 billion or 18% driven by investments in cloud engineering, Gaming, and LinkedIn.

Sales and Marketing

(In millions, except percentages)		2022		2021	Percentage Change
Sales and marketing	\$	21,825	\$	20,117	8%
As a percent of revenue		11%		12%	(1)ppt

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel, and the costs of advertising, promotions, trade shows, seminars, and other programs.

Sales and marketing expenses increased \$1.7 billion or 8% driven by investments in commercial sales and LinkedIn. Sales and marketing included a favorable foreign currency impact of 2%.

General and Administrative

(In millions, except percentages)		2022		2021	Percentage Change
General and administrative	\$	5,900	\$	5,107	16%
As a percent of revenue		3%		3%	0ppt

General and administrative expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with finance, legal, facilities, certain human resources and other administrative personnel, certain taxes, and legal and other administrative fees.

General and administrative expenses increased \$793 million or 16% driven by investments in corporate functions.

OTHER INCOME (EXPENSE), NET

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

(In millions)

Year Ended June 30,	2022	2021
Interest and dividends income	\$ 2,094	\$ 2,131
Interest expense	(2,063)	(2,346)
Net recognized gains on investments	461	1,232
Net gains (losses) on derivatives	(52)	17
Net gains (losses) on foreign currency remeasurements	(75)	54
Other, net	(32)	98
Total	\$ 333	\$ 1,186

We use derivative instruments to manage risks related to foreign currencies, equity prices, interest rates, and credit; enhance investment returns; and facilitate portfolio diversification. Gains and losses from changes in fair values of derivatives that are not designated as hedging instruments are primarily recognized in other income (expense), net.

Interest and dividends income decreased due to lower portfolio balances. Interest expense decreased due to a decrease in outstanding long-term debt due to debt maturities. Net recognized gains on investments decreased primarily due to lower gains on equity securities.

INCOME TAXES

Effective Tax Rate

Our effective tax rate for fiscal years 2022 and 2021 was 13% and 14%, respectively. The decrease in our effective tax rate was primarily due to a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties, offset in part by changes in the mix of our income before income taxes between the U.S. and foreign countries, as well as tax benefits in the prior year from the India Supreme Court decision on withholding taxes in the case of Engineering Analysis Centre of Excellent Private Limited vs The Commissioner of Income Tax, an agreement between the U.S. and India tax authorities related to transfer pricing, and final Tax Cuts and Jobs Act ("TCJA") regulations.

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeds the current tax liability from the U.S. global intangible low-taxed income tax.

We have historically paid India withholding taxes on software sales through distributor withholding and tax audit assessments in India. In March 2021, the India Supreme Court ruled favorably for companies in 86 separate appeals, some dating back to 2012, holding that software sales are not subject to India withholding taxes. Although we were not a party to the appeals, our software sales in India were determined to be not subject to withholding taxes. Therefore, we recorded a net income tax benefit of \$620 million in the third quarter of fiscal year 2021 to reflect the results of the India Supreme Court decision impacting fiscal year 1996 through fiscal year 2016.

Our effective tax rate was lower than the U.S. federal statutory rate, primarily due to the net income tax benefit related to the transfer of intangible properties, earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland, and tax benefits relating to stock-based compensation.

The mix of income before income taxes between the U.S. and foreign countries impacted our effective tax rate as a result of the geographic distribution of, and customer demand for, our products and services. In fiscal year 2022, our U.S. income before income taxes was \$47.8 billion and our foreign income before income taxes was \$35.9 billion. In fiscal year 2021, our U.S. income before income taxes was \$35.0 billion and our foreign income before income taxes was \$36.1 billion.

Uncertain Tax Positions

We settled a portion of the Internal Revenue Service ("IRS") audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of June 30, 2022, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues and do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2021, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

NON-GAAP FINANCIAL MEASURES

Adjusted net income and adjusted diluted EPS are non-GAAP financial measures which exclude the net tax benefit related to the transfer of intangible properties in the first quarter of fiscal year 2022 and the net income tax benefit related to an India Supreme Court decision on withholding taxes in the third quarter of fiscal year 2021. We believe these non-GAAP measures aid investors by providing additional insight into our operational performance and help clarify trends affecting our business. For comparability of reporting, management considers non-GAAP measures in conjunction with GAAP financial results in evaluating business performance. These non-GAAP financial measures presented should not be considered a substitute for, or superior to, the measures of financial performance prepared in accordance with GAAP.

The following table reconciles our financial results reported in accordance with GAAP to non-GAAP financial results:

(In millions, except percentages and per share amounts)	2022	2021	Percentage Change
Net income	\$ 72,738	\$ 61,271	19%
Net income tax benefit related to transfer of intangible properties	(3,291)	0	*
Net income tax benefit related to India Supreme Court decision on withholding taxes	0	(620)	*
Adjusted net income (non-GAAP)	\$ 69,447	\$ 60,651	15%
Diluted earnings per share	\$ 9.65	\$ 8.05	20%
Net income tax benefit related to transfer of intangible properties	(0.44)	0	*
Net income tax benefit related to India Supreme Court decision on withholding taxes	0	(0.08)	*
Adjusted diluted earnings per share (non-GAAP)	\$ 9.21	\$ 7.97	16%

* Not meaningful.

LIQUIDITY AND CAPITAL RESOURCES

We expect existing cash, cash equivalents, short-term investments, cash flows from operations, and access to capital markets to continue to be sufficient to fund our operating activities and cash commitments for investing and financing activities, such as dividends, share repurchases, debt maturities, material capital expenditures, and the transition tax related to the TCJA, for at least the next 12 months and thereafter for the foreseeable future.

Cash, Cash Equivalents, and Investments

Cash, cash equivalents, and short-term investments totaled \$104.8 billion and \$130.3 billion as of June 30, 2022 and 2021, respectively. Equity investments were \$6.9 billion and \$6.0 billion as of June 30, 2022 and 2021, respectively. Our short-term investments are primarily intended to facilitate liquidity and capital preservation. They consist predominantly of highly liquid investment-grade fixed-income securities, diversified among industries and individual issuers. The investments are predominantly U.S. dollar-denominated securities, but also include foreign currency-denominated securities to diversify risk. Our fixed-income investments are exposed to interest rate risk and credit risk. The credit risk and average maturity of our fixed-income portfolio are managed to achieve economic returns that correlate to certain fixed-income indices. The settlement risk related to these investments is insignificant given that the short-term investments held are primarily highly liquid investment-grade fixed-income securities.

Valuation

In general, and where applicable, we use quoted prices in active markets for identical assets or liabilities to determine the fair value of our financial instruments. This pricing methodology applies to our Level 1 investments, such as U.S. government securities, common and preferred stock, and mutual funds. If quoted prices in active markets for identical assets or liabilities are not available to determine fair value, then we use quoted prices for similar assets and liabilities or inputs other than the quoted prices that are observable either directly or indirectly. This pricing methodology applies to our Level 2 investments, such as commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Level 3 investments are valued using internally-developed models with unobservable inputs. Assets and liabilities measured at fair value on a recurring basis using unobservable inputs are an immaterial portion of our portfolio.

A majority of our investments are priced by pricing vendors and are generally Level 1 or Level 2 investments as these vendors either provide a quoted market price in an active market or use observable inputs for their pricing without applying significant adjustments. Broker pricing is used mainly when a quoted price is not available, the investment is not priced by our pricing vendors, or when a broker price is more reflective of fair values in the market in which the investment trades. Our broker-priced investments are generally classified as Level 2 investments because the broker prices these investments based on similar assets without applying significant adjustments. In addition, all our broker-priced investments have a sufficient level of trading volume to demonstrate that the fair values used are appropriate for these investments. Our fair value processes include controls that are designed to ensure appropriate fair values are recorded. These controls include model validation, review of key model inputs, analysis of period-over-period fluctuations, and independent recalculation of prices where appropriate.

Cash Flows

Cash from operations increased \$12.3 billion to \$89.0 billion for fiscal year 2022, mainly due to an increase in cash received from customers, offset in part by an increase in cash paid to suppliers and employees. Cash used in financing increased \$10.4 billion to \$58.9 billion for fiscal year 2022, mainly due to a \$5.3 billion increase in common stock repurchases and a \$5.3 billion increase in repayments of debt. Cash used in investing increased \$2.7 billion to \$30.3 billion for fiscal year 2022, mainly due to a \$13.1 billion increase in cash used for acquisitions of companies, net of cash acquired, and purchases of intangible and other assets, and a \$3.3 billion increase in additions to property and equipment, offset in part by a \$15.6 billion increase in cash from net investment purchases, sales, and maturities.

Debt Proceeds

We issue debt to take advantage of favorable pricing and liquidity in the debt markets, reflecting our credit rating and the low interest rate environment. The proceeds of these issuances were or will be used for general corporate purposes, which may include, among other things, funding for working capital, capital expenditures, repurchases of capital stock, acquisitions, and repayment of existing debt. In March 2021 and June 2020, we exchanged a portion of our existing debt at a premium for cash and new debt with longer maturities to take advantage of favorable financing rates in the debt markets, reflecting our credit rating and the low interest rate environment. Refer to Note 11 – Debt of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

Unearned Revenue

Unearned revenue comprises mainly unearned revenue related to volume licensing programs, which may include Software Assurance (“SA”) and cloud services. Unearned revenue is generally invoiced annually at the beginning of each contract period for multi-year agreements and recognized ratably over the coverage period. Unearned revenue also includes payments for other offerings for which we have been paid in advance and earn the revenue when we transfer control of the product or service. Refer to Note 1 – Accounting Policies of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

The following table outlines the expected future recognition of unearned revenue as of June 30, 2022:

(In millions)

Three Months Ending		
September 30, 2022	\$	17,691
December 31, 2022		13,923
March 31, 2023		9,491
June 30, 2023		4,433
Thereafter		2,870
Total	\$	48,408

If our customers choose to license cloud-based versions of our products and services rather than licensing transaction-based products and services, the associated revenue will shift from being recognized at the time of the transaction to being recognized over the subscription period or upon consumption, as applicable.

Material Cash Requirements and Other Obligations

Contractual Obligations

The following table summarizes the payments due by fiscal year for our outstanding contractual obligations as of June 30, 2022:

(In millions)	2023	Thereafter	Total
Long-term debt: (a)			
Principal payments	\$ 2,750	\$ 52,761	\$ 55,511
Interest payments	1,468	21,139	22,607
Construction commitments (b)	7,942	576	8,518
Operating and finance leases, including imputed interest (c)	4,609	44,045	48,654
Purchase commitments (d)	42,669	2,985	45,654
Total	\$ 59,438	\$ 121,506	\$ 180,944

(a) Refer to Note 11 – Debt of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K).

(b) Refer to Note 7 – Property and Equipment of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K).

(c) Refer to Note 14 – Leases of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K).

(d) Purchase commitments primarily relate to datacenters and include open purchase orders and take-or-pay contracts that are not presented as construction commitments above.

Income Taxes

As a result of the TCJA, we are required to pay a one-time transition tax on deferred foreign income not previously subject to U.S. income tax. Under the TCJA, the transition tax is payable in interest-free installments over eight years, with 8% due in each of the first five years, 15% in year six, 20% in year seven, and 25% in year eight. We have paid transition tax of \$6.2 billion, which included \$1.5 billion for fiscal year 2022. The remaining transition tax of \$12.0 billion is payable over the next four years, with \$1.3 billion payable within 12 months.

Provisions enacted in the TCJA related to the capitalization for tax purposes of research and experimental expenditures became effective on July 1, 2022. These provisions require us to capitalize research and experimental expenditures and amortize them on the U.S. tax return over five or fifteen years, depending on where research is conducted. The final foreign tax credit regulations, also effective on July 1, 2022, introduced significant changes to foreign tax credit calculations in the U.S. tax return. While these provisions are not expected to have a material impact on our fiscal year 2023 effective tax rate on a net basis, our cash paid for taxes would increase unless these provisions are postponed or modified through legislative processes.

Share Repurchases

During fiscal years 2022 and 2021, we repurchased 95 million shares and 101 million shares of our common stock for \$28.0 billion and \$23.0 billion, respectively, through our share repurchase programs. All repurchases were made using cash resources. As of June 30, 2022, \$40.7 billion remained of our \$60 billion share repurchase program. Refer to Note 16 – Stockholders' Equity of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

Dividends

During fiscal year 2022, our Board of Directors declared quarterly dividends of \$0.62 per share. We intend to continue returning capital to shareholders in the form of dividends, subject to declaration by our Board of Directors. Refer to Note 16 – Stockholders' Equity of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

Other Planned Uses of Capital

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. ("Activision Blizzard") for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard's net cash. The acquisition has been approved by Activision Blizzard's shareholders, and we expect it to close in fiscal year 2023, subject to the satisfaction of certain regulatory approvals and other customary closing conditions.

We will continue to invest in sales, marketing, product support infrastructure, and existing and advanced areas of technology, as well as continue making acquisitions that align with our business strategy. Additions to property and equipment will continue, including new facilities, datacenters, and computer systems for research and development, sales and marketing, support, and administrative staff. We expect capital expenditures to increase in coming years to support growth in our cloud offerings. We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. We have not engaged in any related party transactions or arrangements with unconsolidated entities or other persons that are reasonably likely to materially affect liquidity or the availability of capital resources.

RECENT ACCOUNTING GUIDANCE

Refer to Note 1 – Accounting Policies of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for further discussion.

CRITICAL ACCOUNTING ESTIMATES

Our consolidated financial statements and accompanying notes are prepared in accordance with GAAP. Preparing consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Critical accounting estimates are those estimates that involve a significant level of estimation uncertainty and could have a material impact on our financial condition or results of operations. We have critical accounting estimates in the areas of revenue recognition, impairment of investment securities, goodwill, research and development costs, legal and other contingencies, income taxes, and inventories.

Revenue Recognition

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the stand-alone selling price ("SSP") for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.

Impairment of Investment Securities

We review debt investments quarterly for credit losses and impairment. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. This determination requires significant judgment. In making this judgment, we employ a systematic methodology that considers available quantitative and qualitative evidence in evaluating potential impairment of our investments. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments without readily determinable fair values are written down to fair value if a qualitative assessment indicates that the investment is impaired and the fair value of the investment is less than carrying value. We perform a qualitative assessment on a periodic basis. We are required to estimate the fair value of the investment to determine the amount of the impairment loss. Once an investment is determined to be impaired, an impairment charge is recorded in other income (expense), net.

Goodwill

We allocate goodwill to reporting units based on the reporting unit expected to benefit from the business combination. We evaluate our reporting units on an annual basis and, if necessary, reassign goodwill using a relative fair value allocation approach. Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis (May 1 for us) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. These events or circumstances could include a significant change in the business climate, legal factors, operating performance indicators, competition, or sale or disposition of a significant portion of a reporting unit.

Application of the goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units, and determination of the fair value of each reporting unit. The fair value of each reporting unit is estimated primarily through the use of a discounted cash flow methodology. This analysis requires significant judgments, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term rate of growth for our business, estimation of the useful life over which cash flows will occur, and determination of our weighted average cost of capital.

The estimates used to calculate the fair value of a reporting unit change from year to year based on operating results, market conditions, and other factors. Changes in these estimates and assumptions could materially affect the determination of fair value and goodwill impairment for each reporting unit.

Research and Development Costs

Costs incurred internally in researching and developing a computer software product are charged to expense until technological feasibility has been established for the product. Once technological feasibility is established, software costs are capitalized until the product is available for general release to customers. Judgment is required in determining when technological feasibility of a product is established. We have determined that technological feasibility for our software products is reached after all high-risk development issues have been resolved through coding and testing. Generally, this occurs shortly before the products are released to production. The amortization of these costs is included in cost of revenue over the estimated life of the products.

Legal and Other Contingencies

The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. An estimated loss from a loss contingency such as a legal proceeding or claim is accrued by a charge to income if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. In determining whether a loss should be accrued we evaluate, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Changes in these factors could materially impact our consolidated financial statements.

Income Taxes

The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year, and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity's financial statements or tax returns. We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Accounting literature also provides guidance on derecognition of income tax assets and liabilities, classification of deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions, and income tax disclosures. Judgment is required in assessing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. Variations in the actual outcome of these future tax consequences could materially impact our consolidated financial statements.

Inventories

Inventories are stated at average cost, subject to the lower of cost or net realizable value. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. Net realizable value is the estimated selling price less estimated costs of completion, disposal, and transportation. We regularly review inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of our inventory. These reviews include analysis of demand forecasts, product life cycle status, product development plans, current sales levels, pricing strategy, and component cost trends. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis through a charge to cost of revenue.

CHANGE IN ACCOUNTING ESTIMATE

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate will be effective beginning fiscal year 2023. Based on the carrying amount of server and network equipment included in property and equipment, net as of June 30, 2022, it is estimated this change will increase our fiscal year 2023 operating income by \$3.7 billion. We had previously increased the estimated useful lives of both server and network equipment in July 2020.

STATEMENT OF MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

Management is responsible for the preparation of the consolidated financial statements and related information that are presented in this report. The consolidated financial statements, which include amounts based on management's estimates and judgments, have been prepared in conformity with accounting principles generally accepted in the United States of America.

The Company designs and maintains accounting and internal control systems to provide reasonable assurance at reasonable cost that assets are safeguarded against loss from unauthorized use or disposition, and that the financial records are reliable for preparing consolidated financial statements and maintaining accountability for assets. These systems are augmented by written policies, an organizational structure providing division of responsibilities, careful selection and training of qualified personnel, and a program of internal audits.

The Company engaged Deloitte & Touche LLP, an independent registered public accounting firm, to audit and render an opinion on the consolidated financial statements and internal control over financial reporting in accordance with the standards of the Public Company Accounting Oversight Board (United States).

The Board of Directors, through its Audit Committee, consisting solely of independent directors of the Company, meets periodically with management, internal auditors, and our independent registered public accounting firm to ensure that each is meeting its responsibilities and to discuss matters concerning internal controls and financial reporting. Deloitte & Touche LLP and the internal auditors each have full and free access to the Audit Committee.

Satya Nadella
Chief Executive Officer

Amy E. Hood
Executive Vice President and Chief Financial Officer

Alice L. Jolla
Corporate Vice President and Chief Accounting Officer

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

RISKS

We are exposed to economic risk from foreign exchange rates, interest rates, credit risk, and equity prices. We use derivatives instruments to manage these risks, however, they may still impact our consolidated financial statements.

Foreign Currencies

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency positions, including hedges. Principal currency exposures include the Euro, Japanese yen, British pound, Canadian dollar, and Australian dollar.

Interest Rate

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of the fixed-income portfolio to achieve economic returns that correlate to certain global fixed-income indices.

Credit

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We manage credit exposures relative to broad-based indices and to facilitate portfolio diversification.

Equity

Securities held in our equity investments portfolio are subject to price risk.

SENSITIVITY ANALYSIS

The following table sets forth the potential loss in future earnings or fair values, including associated derivatives, resulting from hypothetical changes in relevant market rates or prices:

(In millions)

Risk Categories	Hypothetical Change	June 30, 2022	Impact
Foreign currency — Revenue	10% decrease in foreign exchange rates	\$ (6,822)	Earnings
Foreign currency — Investments	10% decrease in foreign exchange rates	(94)	Fair Value
Interest rate	100 basis point increase in U.S. treasury interest rates	(2,536)	Fair Value
Credit	100 basis point increase in credit spreads	(350)	Fair Value
Equity	10% decrease in equity market prices	(637)	Earnings

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INCOME STATEMENTS

(In millions, except per share amounts)

Year Ended June 30,	2022	2021	2020
Revenue:			
Product	\$ 72,732	\$ 71,074	\$ 68,041
Service and other	125,538	97,014	74,974
Total revenue	198,270	168,088	143,015
Cost of revenue:			
Product	19,064	18,219	16,017
Service and other	43,586	34,013	30,061
Total cost of revenue	62,650	52,232	46,078
Gross margin	135,620	115,856	96,937
Research and development	24,512	20,716	19,269
Sales and marketing	21,825	20,117	19,598
General and administrative	5,900	5,107	5,111
Operating income	83,383	69,916	52,959
Other income, net	333	1,186	77
Income before income taxes	83,716	71,102	53,036
Provision for income taxes	10,978	9,831	8,755
Net income	\$ 72,738	\$ 61,271	\$ 44,281
Earnings per share:			
Basic	\$ 9.70	\$ 8.12	\$ 5.82
Diluted	\$ 9.65	\$ 8.05	\$ 5.76
Weighted average shares outstanding:			
Basic	7,496	7,547	7,610
Diluted	7,540	7,608	7,683

Refer to accompanying notes.

COMPREHENSIVE INCOME STATEMENTS

(In millions)

Year Ended June 30,	2022	2021	2020
Net income	\$ 72,738	\$ 61,271	\$ 44,281
Other comprehensive income (loss), net of tax:			
Net change related to derivatives	6	19	(38)
Net change related to investments	(5,360)	(2,266)	3,990
Translation adjustments and other	(1,146)	873	(426)
Other comprehensive income (loss)	(6,500)	(1,374)	3,526
Comprehensive income	\$ 66,238	\$ 59,897	\$ 47,807

Refer to accompanying notes.

BALANCE SHEETS

(In millions)

June 30,	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,931	\$ 14,224
Short-term investments	90,826	116,110
Total cash, cash equivalents, and short-term investments	104,757	130,334
Accounts receivable, net of allowance for doubtful accounts of \$633 and \$751	44,261	38,043
Inventories	3,742	2,636
Other current assets	16,924	13,393
Total current assets	169,684	184,406
Property and equipment, net of accumulated depreciation of \$59,660 and \$51,351	74,398	59,715
Operating lease right-of-use assets	13,148	11,088
Equity investments	6,891	5,984
Goodwill	67,524	49,711
Intangible assets, net	11,298	7,800
Other long-term assets	21,897	15,075
Total assets	\$ 364,840	\$ 333,779
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 19,000	\$ 15,163
Current portion of long-term debt	2,749	8,072
Accrued compensation	10,661	10,057
Short-term income taxes	4,067	2,174
Short-term unearned revenue	45,538	41,525
Other current liabilities	13,067	11,666
Total current liabilities	95,082	88,657
Long-term debt	47,032	50,074
Long-term income taxes	26,069	27,190
Long-term unearned revenue	2,870	2,616
Deferred income taxes	230	198
Operating lease liabilities	11,489	9,629
Other long-term liabilities	15,526	13,427
Total liabilities	198,298	191,791
Commitments and contingencies		
Stockholders' equity:		
Common stock and paid-in capital – shares authorized 24,000; outstanding 7,464 and 7,519	86,939	83,111
Retained earnings	84,281	57,055
Accumulated other comprehensive income (loss)	(4,678)	1,822
Total stockholders' equity	166,542	141,988
Total liabilities and stockholders' equity	\$ 364,840	\$ 333,779

Refer to accompanying notes.

CASH FLOWS STATEMENTS

(In millions)

Year Ended June 30,	2022	2021	2020
Operations			
Net income	\$ 72,738	\$ 61,271	\$ 44,281
Adjustments to reconcile net income to net cash from operations:			
Depreciation, amortization, and other	14,460	11,686	12,796
Stock-based compensation expense	7,502	6,118	5,289
Net recognized gains on investments and derivatives	(409)	(1,249)	(219)
Deferred income taxes	(5,702)	(150)	11
Changes in operating assets and liabilities:			
Accounts receivable	(6,834)	(6,481)	(2,577)
Inventories	(1,123)	(737)	168
Other current assets	(709)	(932)	(2,330)
Other long-term assets	(2,805)	(3,459)	(1,037)
Accounts payable	2,943	2,798	3,018
Unearned revenue	5,109	4,633	2,212
Income taxes	696	(2,309)	(3,631)
Other current liabilities	2,344	4,149	1,346
Other long-term liabilities	825	1,402	1,348
Net cash from operations	89,035	76,740	60,675
Financing			
Cash premium on debt exchange	0	(1,754)	(3,417)
Repayments of debt	(9,023)	(3,750)	(5,518)
Common stock issued	1,841	1,693	1,343
Common stock repurchased	(32,696)	(27,385)	(22,968)
Common stock cash dividends paid	(18,135)	(16,521)	(15,137)
Other, net	(863)	(769)	(334)
Net cash used in financing	(58,876)	(48,486)	(46,031)
Investing			
Additions to property and equipment	(23,886)	(20,622)	(15,441)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	(22,038)	(8,909)	(2,521)
Purchases of investments	(26,456)	(62,924)	(77,190)
Maturities of investments	16,451	51,792	66,449
Sales of investments	28,443	14,008	17,721
Other, net	(2,825)	(922)	(1,241)
Net cash used in investing	(30,311)	(27,577)	(12,223)
Effect of foreign exchange rates on cash and cash equivalents	(141)	(29)	(201)
Net change in cash and cash equivalents	(293)	648	2,220
Cash and cash equivalents, beginning of period	14,224	13,576	11,356
Cash and cash equivalents, end of period	\$ 13,931	\$ 14,224	\$ 13,576

Refer to accompanying notes.

STOCKHOLDERS' EQUITY STATEMENTS

(In millions, except per share amounts)

Year Ended June 30,	2022	2021	2020
Common stock and paid-in capital			
Balance, beginning of period	\$ 83,111	\$ 80,552	\$ 78,520
Common stock issued	1,841	1,963	1,343
Common stock repurchased	(5,688)	(5,539)	(4,599)
Stock-based compensation expense	7,502	6,118	5,289
Other, net	173	17	(1)
Balance, end of period	86,939	83,111	80,552
Retained earnings			
Balance, beginning of period	57,055	34,566	24,150
Net income	72,738	61,271	44,281
Common stock cash dividends	(18,552)	(16,871)	(15,483)
Common stock repurchased	(26,960)	(21,879)	(18,382)
Cumulative effect of accounting changes	0	(32)	0
Balance, end of period	84,281	57,055	34,566
Accumulated other comprehensive income (loss)			
Balance, beginning of period	1,822	3,186	(340)
Other comprehensive income (loss)	(6,500)	(1,374)	3,526
Cumulative effect of accounting changes	0	10	0
Balance, end of period	(4,678)	1,822	3,186
Total stockholders' equity	\$ 166,542	\$ 141,988	\$ 118,304
Cash dividends declared per common share	\$ 2.48	\$ 2.24	\$ 2.04

Refer to accompanying notes.

NOTES TO FINANCIAL STATEMENTS

NOTE 1 — ACCOUNTING POLICIES

Accounting Principles

Our consolidated financial statements and accompanying notes are prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP").

We have recast certain prior period amounts to conform to the current period presentation. The recast of these prior period amounts had no impact on our consolidated balance sheets, consolidated income statements, or consolidated cash flows statements.

Principles of Consolidation

The consolidated financial statements include the accounts of Microsoft Corporation and its subsidiaries. Intercompany transactions and balances have been eliminated.

Estimates and Assumptions

Preparing financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, and expenses. Examples of estimates and assumptions include: for revenue recognition, determining the nature and timing of satisfaction of performance obligations, and determining the standalone selling price ("SSP") of performance obligations, variable consideration, and other obligations such as product returns and refunds; loss contingencies; product warranties; the fair value of and/or potential impairment of goodwill and intangible assets for our reporting units; product life cycles; useful lives of our tangible and intangible assets; allowances for doubtful accounts; the market value of, and demand for, our inventory; stock-based compensation forfeiture rates; when technological feasibility is achieved for our products; the potential outcome of uncertain tax positions that have been recognized in our consolidated financial statements or tax returns; and determining the timing and amount of impairments for investments. Actual results and outcomes may differ from management's estimates and assumptions due to risks and uncertainties.

In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate will be effective beginning fiscal year 2023. We had previously increased the estimated useful lives of both server and network equipment in July 2020.

Foreign Currencies

Assets and liabilities recorded in foreign currencies are translated at the exchange rate on the balance sheet date. Revenue and expenses are translated at average rates of exchange prevailing during the year. Translation adjustments resulting from this process are recorded to other comprehensive income.

Revenue

Product Revenue and Service and Other Revenue

Product revenue includes sales from operating systems, cross-device productivity applications, server applications, business solution applications, desktop and server management tools, software development tools, video games, and hardware such as PCs, tablets, gaming and entertainment consoles, other intelligent devices, and related accessories.

Service and other revenue includes sales from cloud-based solutions that provide customers with software, services, platforms, and content such as Office 365, Azure, Dynamics 365, and Xbox; solution support; and consulting services. Service and other revenue also includes sales from online advertising and LinkedIn.

Revenue Recognition

Revenue is recognized upon transfer of control of promised products or services to customers in an amount that reflects the consideration we expect to receive in exchange for those products or services. We enter into contracts that can include various combinations of products and services, which are generally capable of being distinct and accounted for as separate performance obligations. Revenue is recognized net of allowances for returns and any taxes collected from customers, which are subsequently remitted to governmental authorities.

Nature of Products and Services

Licenses for on-premises software provide the customer with a right to use the software as it exists when made available to the customer. Customers may purchase perpetual licenses or subscribe to licenses, which provide customers with the same functionality and differ mainly in the duration over which the customer benefits from the software. Revenue from distinct on-premises licenses is recognized upfront at the point in time when the software is made available to the customer. In cases where we allocate revenue to software updates, primarily because the updates are provided at no additional charge, revenue is recognized as the updates are provided, which is generally ratably over the estimated life of the related device or license.

Certain volume licensing programs, including Enterprise Agreements, include on-premises licenses combined with Software Assurance ("SA"). SA conveys rights to new software and upgrades released over the contract period and provides support, tools, and training to help customers deploy and use products more efficiently. On-premises licenses are considered distinct performance obligations when sold with SA. Revenue allocated to SA is generally recognized ratably over the contract period as customers simultaneously consume and receive benefits, given that SA comprises distinct performance obligations that are satisfied over time.

Cloud services, which allow customers to use hosted software over the contract period without taking possession of the software, are provided on either a subscription or consumption basis. Revenue related to cloud services provided on a subscription basis is recognized ratably over the contract period. Revenue related to cloud services provided on a consumption basis, such as the amount of storage used in a period, is recognized based on the customer utilization of such resources. When cloud services require a significant level of integration and interdependency with software and the individual components are not considered distinct, all revenue is recognized over the period in which the cloud services are provided.

Revenue from search advertising is recognized when the advertisement appears in the search results or when the action necessary to earn the revenue has been completed. Revenue from consulting services is recognized as services are provided.

Our hardware is generally highly dependent on, and interrelated with, the underlying operating system and cannot function without the operating system. In these cases, the hardware and software license are accounted for as a single performance obligation and revenue is recognized at the point in time when ownership is transferred to resellers or directly to end customers through retail stores and online marketplaces.

Refer to Note 19 – Segment Information and Geographic Data for further information, including revenue by significant product and service offering.

Significant Judgments

Our contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. When a cloud-based service includes both on-premises software licenses and cloud services, judgment is required to determine whether the software license is considered distinct and accounted for separately, or not distinct and accounted for together with the cloud service and recognized over time. Certain cloud services, primarily Office 365, depend on a significant level of integration, interdependency, and interrelation between the desktop applications and cloud services, and are accounted for together as one performance obligation. Revenue from Office 365 is recognized ratably over the period in which the cloud services are provided.

Judgment is required to determine the SSP for each distinct performance obligation. We use a single amount to estimate SSP for items that are not sold separately, including on-premises licenses sold with SA or software updates provided at no additional charge. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount to be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, we may use information such as the size of the customer and geographic region in determining the SSP.

Due to the various benefits from and the nature of our SA program, judgment is required to assess the pattern of delivery, including the exercise pattern of certain benefits across our portfolio of customers.

Our products are generally sold with a right of return, we may provide other credits or incentives, and in certain instances we estimate customer usage of our products and services, which are accounted for as variable consideration when determining the amount of revenue to recognize. Returns and credits are estimated at contract inception and updated at the end of each reporting period if additional information becomes available. Changes to our estimated variable consideration were not material for the periods presented.

Contract Balances and Other Receivables

Timing of revenue recognition may differ from the timing of invoicing to customers. We record a receivable when revenue is recognized prior to invoicing, or unearned revenue when revenue is recognized subsequent to invoicing. For multi-year agreements, we generally invoice customers annually at the beginning of each annual coverage period. We record a receivable related to revenue recognized for multi-year on-premises licenses as we have an unconditional right to invoice and receive payment in the future related to those licenses.

Unearned revenue comprises mainly unearned revenue related to volume licensing programs, which may include SA and cloud services. Unearned revenue is generally invoiced annually at the beginning of each contract period for multi-year agreements and recognized ratably over the coverage period. Unearned revenue also includes payments for consulting services to be performed in the future, LinkedIn subscriptions, Office 365 subscriptions, Xbox subscriptions, Windows post-delivery support, Dynamics business solutions, and other offerings for which we have been paid in advance and earn the revenue when we transfer control of the product or service.

Refer to Note 13 – Unearned Revenue for further information, including unearned revenue by segment and changes in unearned revenue during the period.

Payment terms and conditions vary by contract type, although terms generally include a requirement of payment within 30 to 60 days. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined our contracts generally do not include a significant financing component. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our products and services, not to receive financing from our customers or to provide customers with financing. Examples include invoicing at the beginning of a subscription term with revenue recognized ratably over the contract period, and multi-year on-premises licenses that are invoiced annually with revenue recognized upfront.

As of June 30, 2022 and 2021, other receivables due from suppliers were \$ 1.0 billion and \$965 million, respectively, and are included in accounts receivable, net in our consolidated balance sheets.

As of June 30, 2022 and 2021, long-term accounts receivable, net of allowance for doubtful accounts, was \$ 3.8 billion and \$3.4 billion, respectively, and is included in other long-term assets in our consolidated balance sheets.

The allowance for doubtful accounts reflects our best estimate of probable losses inherent in the accounts receivable balance. We determine the allowance based on known troubled accounts, historical experience, and other currently available evidence.

Activity in the allowance for doubtful accounts was as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Balance, beginning of period	\$ 798	\$ 816	\$ 434
Charged to costs and other	157	234	560
Write-offs	(245)	(252)	(178)
Balance, end of period	\$ 710	\$ 798	\$ 816

Allowance for doubtful accounts included in our consolidated balance sheets:

(In millions)

June 30,	2022	2021	2020
Accounts receivable, net of allowance for doubtful accounts	\$ 633	\$ 751	\$ 788
Other long-term assets	77	47	28
Total	\$ 710	\$ 798	\$ 816

We record financing receivables when we offer certain of our customers the option to acquire our software products and services offerings through a financing program in a limited number of countries. As of June 30, 2022 and 2021, our financing receivables, net were \$4.1 billion and \$4.4 billion, respectively, for short-term and long-term financing receivables, which are included in other current assets and other long-term assets in our consolidated balance sheets. We record an allowance to cover expected losses based on troubled accounts, historical experience, and other currently available evidence.

Assets Recognized from Costs to Obtain a Contract with a Customer

We recognize an asset for the incremental costs of obtaining a contract with a customer if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs meet the requirements to be capitalized. Total capitalized costs to obtain a contract were immaterial during the periods presented and are included in other current and long-term assets in our consolidated balance sheets.

We apply a practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. These costs include our internal sales force compensation program and certain partner sales incentive programs as we have determined annual compensation is commensurate with annual sales activities.

Cost of Revenue

Cost of revenue includes: manufacturing and distribution costs for products sold and programs licensed; operating costs related to product support service centers and product distribution centers; costs incurred to include software on PCs sold by original equipment manufacturers ("OEM"), to drive traffic to our websites, and to acquire online advertising space; costs incurred to support and maintain online products and services, including datacenter costs and royalties; warranty costs; inventory valuation adjustments; costs associated with the delivery of consulting services; and the amortization of capitalized software development costs. Capitalized software development costs are amortized over the estimated lives of the products.

Product Warranty

We provide for the estimated costs of fulfilling our obligations under hardware and software warranties at the time the related revenue is recognized. For hardware warranties, we estimate the costs based on historical and projected product failure rates, historical and projected repair costs, and knowledge of specific product failures (if any). The specific hardware warranty terms and conditions vary depending upon the product sold and the country in which we do business, but generally include parts and labor over a period generally ranging from 90 days to three years. For software warranties, we estimate the costs to provide bug fixes, such as security patches, over the estimated life of the software. We regularly reevaluate our estimates to assess the adequacy of the recorded warranty liabilities and adjust the amounts as necessary.

Research and Development

Research and development expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with product development. Research and development expenses also include third-party development and programming costs, localization costs incurred to translate software for international markets, and the amortization of purchased software code and services content. Such costs related to software development are included in research and development expense until the point that technological feasibility is reached, which for our software products, is generally shortly before the products are released to production. Once technological feasibility is reached, such costs are capitalized and amortized to cost of revenue over the estimated lives of the products.

Sales and Marketing

Sales and marketing expenses include payroll, employee benefits, stock-based compensation expense, and other headcount-related expenses associated with sales and marketing personnel, and the costs of advertising, promotions, trade shows, seminars, and other programs. Advertising costs are expensed as incurred. Advertising expense was \$1.5 billion, \$1.5 billion, and \$1.6 billion in fiscal years 2022, 2021, and 2020, respectively.

Stock-Based Compensation

Compensation cost for stock awards, which include restricted stock units ("RSUs") and performance stock units ("PSUs"), is measured at the fair value on the grant date and recognized as expense, net of estimated forfeitures, over the related service or performance period. The fair value of stock awards is based on the quoted price of our common stock on the grant date less the present value of expected dividends not received during the vesting period. We measure the fair value of PSUs using a Monte Carlo valuation model. Compensation cost for RSUs is recognized using the straight-line method and for PSUs is recognized using the accelerated method.

Compensation expense for the employee stock purchase plan ("ESPP") is measured as the discount the employee is entitled to upon purchase and is recognized in the period of purchase.

Income Taxes

Income tax expense includes U.S. and international income taxes, and interest and penalties on uncertain tax positions. Certain income and expenses are not reported in tax returns and financial statements in the same year. The tax effect of such temporary differences is reported as deferred income taxes. Deferred tax assets are reported net of a valuation allowance when it is more likely than not that a tax benefit will not be realized. All deferred income taxes are classified as long-term in our consolidated balance sheets.

Financial Instruments

Investments

We consider all highly liquid interest-earning investments with a maturity of three months or less at the date of purchase to be cash equivalents. The fair values of these investments approximate their carrying values. In general, investments with original maturities of greater than three months and remaining maturities of less than one year are classified as short-term investments. Investments with maturities beyond one year may be classified as short-term based on their highly liquid nature and because such marketable securities represent the investment of cash that is available for current operations.

Debt investments are classified as available-for-sale and realized gains and losses are recorded using the specific identification method. Changes in fair value, excluding credit losses and impairments, are recorded in other comprehensive income. Fair value is calculated based on publicly available market information or other estimates determined by management. If the cost of an investment exceeds its fair value, we evaluate, among other factors, general market conditions, credit quality of debt instrument issuers, and the extent to which the fair value is less than cost. To determine credit losses, we employ a systematic methodology that considers available quantitative and qualitative evidence. In addition, we consider specific adverse conditions related to the financial health of, and business outlook for, the investee. If we have plans to sell the security or it is more likely than not that we will be required to sell the security before recovery, then a decline in fair value below cost is recorded as an impairment charge in other income (expense), net and a new cost basis in the investment is established. If market, industry, and/or investee conditions deteriorate, we may incur future impairments.

Equity investments with readily determinable fair values are measured at fair value. Equity investments without readily determinable fair values are measured using the equity method or measured at cost with adjustments for observable changes in price or impairments (referred to as the measurement alternative). We perform a qualitative assessment on a periodic basis and recognize an impairment if there are sufficient indicators that the fair value of the investment is less than carrying value. Changes in value are recorded in other income (expense), net.

Derivatives

Derivative instruments are recognized as either assets or liabilities and measured at fair value. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation.

For derivative instruments designated as fair value hedges, gains and losses are recognized in other income (expense), net with offsetting gains and losses on the hedged items. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments designated as cash flow hedges, gains and losses are initially reported as a component of other comprehensive income and subsequently recognized in other income (expense), net with the corresponding hedged item. Gains and losses representing hedge components excluded from the assessment of effectiveness are recognized in other income (expense), net.

For derivative instruments that are not designated as hedges, gains and losses from changes in fair values are primarily recognized in other income (expense), net.

Fair Value Measurements

We account for certain assets and liabilities at fair value. The hierarchy below lists three levels of fair value based on the extent to which inputs used in measuring fair value are observable in the market. We categorize each of our fair value measurements in one of these three levels based on the lowest level input that is significant to the fair value measurement in its entirety. These levels are:

- *Level 1* – inputs are based upon unadjusted quoted prices for identical instruments in active markets. Our Level 1 investments include U.S. government securities, common and preferred stock, and mutual funds. Our Level 1 derivative assets and liabilities include those actively traded on exchanges.
- *Level 2* – inputs are based upon quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-based valuation techniques (e.g. the Black-Scholes model) for which all significant inputs are observable in the market or can be corroborated by observable market data for substantially the full term of the assets or liabilities. Where applicable, these models project future cash flows and discount the future amounts to a present value using market-based observable inputs including interest rate curves, credit spreads, foreign exchange rates, and forward and spot prices for currencies. Our Level 2 investments include commercial paper, certificates of deposit, U.S. agency securities, foreign government bonds, mortgage- and asset-backed securities, corporate notes and bonds, and municipal securities. Our Level 2 derivative assets and liabilities include certain over-the-counter forward, option, and swap contracts.

- *Level 3* – inputs are generally unobservable and typically reflect management’s estimates of assumptions that market participants would use in pricing the asset or liability. The fair values are therefore determined using model-based techniques, including option pricing models and discounted cash flow models. Our Level 3 assets and liabilities include investments in corporate notes and bonds, municipal securities, and goodwill and intangible assets, when they are recorded at fair value due to an impairment charge. Unobservable inputs used in the models are significant to the fair values of the assets and liabilities.

We measure equity investments without readily determinable fair values on a nonrecurring basis. The fair values of these investments are determined based on valuation techniques using the best information available, and may include quoted market prices, market comparables, and discounted cash flow projections.

Our other current financial assets and current financial liabilities have fair values that approximate their carrying values.

Inventories

Inventories are stated at average cost, subject to the lower of cost or net realizable value. Cost includes materials, labor, and manufacturing overhead related to the purchase and production of inventories. Net realizable value is the estimated selling price less estimated costs of completion, disposal, and transportation. We regularly review inventory quantities on hand, future purchase commitments with our suppliers, and the estimated utility of our inventory. If our review indicates a reduction in utility below carrying value, we reduce our inventory to a new cost basis through a charge to cost of revenue.

Property and Equipment

Property and equipment is stated at cost less accumulated depreciation, and depreciated using the straight-line method over the shorter of the estimated useful life of the asset or the lease term. The estimated useful lives of our property and equipment are generally as follows: computer software developed or acquired for internal use, three to seven years; computer equipment, two to four years; buildings and improvements, five to 15 years; leasehold improvements, three to 20 years; and furniture and equipment, one to 10 years. Land is not depreciated.

Leases

We determine if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use (“ROU”) assets, other current liabilities, and operating lease liabilities in our consolidated balance sheets. Finance leases are included in property and equipment, other current liabilities, and other long-term liabilities in our consolidated balance sheets.

ROU assets represent our right to use an underlying asset for the lease term and lease liabilities represent our obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As most of our leases do not provide an implicit rate, we generally use our incremental borrowing rate based on the estimated rate of interest for collateralized borrowing over a similar term of the lease payments at commencement date. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. Our lease terms may include options to extend or terminate the lease when it is reasonably certain that we will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term.

We have lease agreements with lease and non-lease components, which are generally accounted for separately. For certain equipment leases, such as vehicles, we account for the lease and non-lease components as a single lease component. Additionally, for certain equipment leases, we apply a portfolio approach to effectively account for the operating lease ROU assets and liabilities.

Goodwill

Goodwill is tested for impairment at the reporting unit level (operating segment or one level below an operating segment) on an annual basis (May 1 for us) and between annual tests if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value.

Intangible Assets

Our intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit, ranging from one to 20 years. We evaluate the recoverability of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful lives or that indicate the asset may be impaired.

Recent Accounting Guidance

Accounting for Income Taxes

In December 2019, the Financial Accounting Standards Board issued a new standard to simplify the accounting for income taxes. The guidance eliminates certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period, and the recognition of deferred tax liabilities for outside basis differences related to changes in ownership of equity method investments and foreign subsidiaries. The guidance also simplifies aspects of accounting for franchise taxes and enacted changes in tax laws or rates and clarifies the accounting for transactions that result in a step-up in the tax basis of goodwill. We adopted the standard effective July 1, 2021. Adoption of the standard did not have a material impact on our consolidated financial statements.

NOTE 2 — EARNINGS PER SHARE

Basic earnings per share ("EPS") is computed based on the weighted average number of shares of common stock outstanding during the period. Diluted EPS is computed based on the weighted average number of shares of common stock plus the effect of dilutive potential common shares outstanding during the period using the treasury stock method. Dilutive potential common shares include outstanding stock options and stock awards.

The components of basic and diluted EPS were as follows:

(In millions, except earnings per share)

Year Ended June 30,	2022	2021	2020
Net income available for common shareholders (A)	\$ 72,738	\$ 61,271	\$ 44,281
Weighted average outstanding shares of common stock (B)	7,496	7,547	7,610
Dilutive effect of stock-based awards	44	61	73
Common stock and common stock equivalents (C)	7,540	7,608	7,683
Earnings Per Share			
Basic (A/B)	\$ 9.70	\$ 8.12	\$ 5.82
Diluted (A/C)	\$ 9.65	\$ 8.05	\$ 5.76

Anti-dilutive stock-based awards excluded from the calculations of diluted EPS were immaterial during the periods presented.

NOTE 3 — OTHER INCOME (EXPENSE), NET

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

(In millions)

Year Ended June 30,	2022	2021	2020
Interest and dividends income	\$ 2,094	\$ 2,131	\$ 2,680
Interest expense	(2,063)	(2,346)	(2,591)
Net recognized gains on investments	461	1,232	32
Net gains (losses) on derivatives	(52)	17	187
Net gains (losses) on foreign currency remeasurements	(75)	54	(191)
Other, net	(32)	98	(40)
Total	\$ 333	\$ 1,186	\$ 77

Net Recognized Gains (Losses) on Investments

Net recognized gains (losses) on debt investments were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Realized gains from sales of available-for-sale securities	\$ 162	\$ 105	\$ 50
Realized losses from sales of available-for-sale securities	(138)	(40)	(37)
Impairments and allowance for credit losses	(81)	(2)	(17)
Total	<u>\$ (57)</u>	<u>\$ 63</u>	<u>\$ (4)</u>

Net recognized gains (losses) on equity investments were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Net realized gains on investments sold	\$ 29	\$ 123	\$ 83
Net unrealized gains on investments still held	509	1,057	69
Impairments of investments	(20)	(11)	(116)
Total	<u>\$ 518</u>	<u>\$ 1,169</u>	<u>\$ 36</u>

NOTE 4 — INVESTMENTS

Investment Components

The components of investments were as follows:

(In millions)	Fair Value Level	Adjusted Cost Basis	Unrealized Gains	Unrealized Losses	Recorded Basis	Cash and Cash Equivalents	Short-term Investments	Equity Investments
June 30, 2022								
Changes in Fair Value Recorded in Other Comprehensive Income								
Commercial paper	Level 2	\$ 2,500	\$ 0	\$ 0	\$ 2,500	\$ 2,498	\$ 2	\$ 0
Certificates of deposit	Level 2	2,071	0	0	2,071	2,032	39	0
U.S. government securities	Level 1	79,696	29	(2,178)	77,547	9	77,538	0
U.S. agency securities	Level 2	419	0	(9)	410	0	410	0
Foreign government bonds	Level 2	506	0	(24)	482	0	482	0
Mortgage- and asset-backed securities	Level 2	727	1	(30)	698	0	698	0
Corporate notes and bonds	Level 2	11,661	4	(554)	11,111	0	11,111	0
Corporate notes and bonds	Level 3	67	0	0	67	0	67	0
Municipal securities	Level 2	368	19	(13)	374	0	374	0
Municipal securities	Level 3	103	0	(6)	97	0	97	0
Total debt investments		\$ 98,118	\$ 53	\$ (2,814)	\$ 95,357	\$ 4,539	\$ 90,818	\$ 0
Changes in Fair Value Recorded in Net Income								
Equity investments	Level 1				\$ 1,590	\$ 1,134	\$ 0	\$ 456
Equity investments	Other				6,435	0	0	6,435
Total equity investments					\$ 8,025	\$ 1,134	\$ 0	\$ 6,891
Cash					\$ 8,258	\$ 8,258	\$ 0	\$ 0
Derivatives, net (a)					8	0	8	0
Total					\$ 111,648	\$ 13,931	\$ 90,826	\$ 6,891

(In millions)	Fair Value Level	Adjusted Cost Basis	Unrealized Gains	Unrealized Losses	Recorded Basis	Cash and Cash Equivalents	Short-term Investments	Equity Investments
June 30, 2021								
Changes in Fair Value Recorded in Other Comprehensive Income								
Commercial paper	Level 2	\$ 4,316	\$ 0	\$ 0	\$ 4,316	\$ 1,331	\$ 2,985	\$ 0
Certificates of deposit	Level 2	3,615	0	0	3,615	2,920	695	0
U.S. government securities	Level 1	90,664	3,832	(111)	94,385	1,500	92,885	0
U.S. agency securities	Level 2	807	2	0	809	0	809	0
Foreign government bonds	Level 2	6,213	9	(2)	6,220	225	5,995	0
Mortgage- and asset-backed securities	Level 2	3,442	22	(6)	3,458	0	3,458	0
Corporate notes and bonds	Level 2	8,443	249	(9)	8,683	0	8,683	0
Corporate notes and bonds	Level 3	63	0	0	63	0	63	0
Municipal securities	Level 2	308	63	0	371	0	371	0
Municipal securities	Level 3	95	0	(7)	88	0	88	0
Total debt investments		\$ 117,966	\$ 4,177	\$ (135)	\$ 122,008	\$ 5,976	\$ 116,032	\$ 0
Changes in Fair Value Recorded in Net Income								
Equity investments	Level 1				\$ 1,582	\$ 976	\$ 0	\$ 606
Equity investments	Other				5,378	0	0	5,378
Total equity investments					\$ 6,960	\$ 976	\$ 0	\$ 5,984
Cash					\$ 7,272	\$ 7,272	\$ 0	\$ 0
Derivatives, net (a)					78	0	78	0
Total					\$ 136,318	\$ 14,224	\$ 116,110	\$ 5,984

(a) Refer to Note 5 – Derivatives for further information on the fair value of our derivative instruments.

Equity investments presented as “Other” in the tables above include investments without readily determinable fair values measured using the equity method or measured at cost with adjustments for observable changes in price or impairments, and investments measured at fair value using net asset value as a practical expedient which are not categorized in the fair value hierarchy. As of June 30, 2022 and 2021, equity investments without readily determinable fair values measured at cost with adjustments for observable changes in price or impairments were \$3.8 billion and \$3.3 billion, respectively.

Unrealized Losses on Debt Investments

Debt investments with continuous unrealized losses for less than 12 months and 12 months or greater and their related fair values were as follows:

	Less than 12 Months		12 Months or Greater			
(In millions)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Total Fair Value	Total Unrealized Losses
June 30, 2022						
U.S. government and agency securities	\$ 59,092	\$ (1,835)	\$ 2,210	\$ (352)	\$ 61,302	\$ (2,187)
Foreign government bonds	418	(18)	27	(6)	445	(24)
Mortgage- and asset-backed securities	510	(26)	41	(4)	551	(30)
Corporate notes and bonds	9,443	(477)	786	(77)	10,229	(554)
Municipal securities	178	(12)	74	(7)	252	(19)
Total	\$ 69,641	\$ (2,368)	\$ 3,138	\$ (446)	\$ 72,779	\$ (2,814)

	Less than 12 Months		12 Months or Greater			
(In millions)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Total Fair Value	Total Unrealized Losses
June 30, 2021						
U.S. government and agency securities	\$ 5,294	\$ (111)	\$ 0	\$ 0	\$ 5,294	\$ (111)
Foreign government bonds	3,148	(1)	5	(1)	3,153	(2)
Mortgage- and asset-backed securities	1,211	(5)	87	(1)	1,298	(6)
Corporate notes and bonds	1,678	(8)	34	(1)	1,712	(9)
Municipal securities	58	(7)	1	0	59	(7)
Total	\$ 11,389	\$ (132)	\$ 127	\$ (3)	\$ 11,516	\$ (135)

Unrealized losses from fixed-income securities are primarily attributable to changes in interest rates. Management does not believe any remaining unrealized losses represent impairments based on our evaluation of available evidence.

Debt Investment Maturities

(In millions)	Adjusted Cost Basis	Estimated Fair Value
June 30, 2022		
Due in one year or less	\$ 26,480	\$ 26,470
Due after one year through five years	52,006	50,748
Due after five years through 10 years	18,274	16,880
Due after 10 years	1,358	1,259
Total	\$ 98,118	\$ 95,357

NOTE 5 — DERIVATIVES

We use derivative instruments to manage risks related to foreign currencies, interest rates, equity prices, and credit; to enhance investment returns; and to facilitate portfolio diversification. Our objectives for holding derivatives include reducing, eliminating, and efficiently managing the economic impact of these exposures as effectively as possible. Our derivative programs include strategies that both qualify and do not qualify for hedge accounting treatment.

Foreign Currencies

Certain forecasted transactions, assets, and liabilities are exposed to foreign currency risk. We monitor our foreign currency exposures daily to maximize the economic effectiveness of our foreign currency hedge positions.

Foreign currency risks related to certain non-U.S. dollar-denominated investments are hedged using foreign exchange forward contracts that are designated as fair value hedging instruments. Foreign currency risks related to certain Euro-denominated debt are hedged using foreign exchange forward contracts that are designated as cash flow hedging instruments.

Certain options and forwards not designated as hedging instruments are also used to manage the variability in foreign exchange rates on certain balance sheet amounts and to manage other foreign currency exposures.

Interest Rate

Interest rate risks related to certain fixed-rate debt are hedged using interest rate swaps that are designated as fair value hedging instruments to effectively convert the fixed interest rates to floating interest rates.

Securities held in our fixed-income portfolio are subject to different interest rate risks based on their maturities. We manage the average maturity of our fixed-income portfolio to achieve economic returns that correlate to certain broad-based fixed-income indices using exchange-traded option and futures contracts and over-the-counter swap and option contracts. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Equity

Securities held in our equity investments portfolio are subject to market price risk. At times, we may hold options, futures, and swap contracts. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Credit

Our fixed-income portfolio is diversified and consists primarily of investment-grade securities. We use credit default swap contracts to manage credit exposures relative to broad-based indices and to facilitate portfolio diversification. These contracts are not designated as hedging instruments and are included in "Other contracts" in the tables below.

Credit-Risk-Related Contingent Features

Certain of our counterparty agreements for derivative instruments contain provisions that require our issued and outstanding long-term unsecured debt to maintain an investment grade credit rating and require us to maintain minimum liquidity of \$1.0 billion. To the extent we fail to meet these requirements, we will be required to post collateral, similar to the standard convention related to over-the-counter derivatives. As of June 30, 2022, our long-term unsecured debt rating was AAA, and cash investments were in excess of \$ 1.0 billion. As a result, no collateral was required to be posted.

The following table presents the notional amounts of our outstanding derivative instruments measured in U.S. dollar equivalents:

(In millions)	June 30, 2022	June 30, 2021
Designated as Hedging Instruments		
Foreign exchange contracts purchased	\$ 635	\$ 635
Foreign exchange contracts sold	0	6,081
Interest rate contracts purchased	1,139	1,247
Not Designated as Hedging Instruments		
Foreign exchange contracts purchased	10,322	14,223
Foreign exchange contracts sold	21,606	23,391
Other contracts purchased	2,773	2,456
Other contracts sold	544	763

Fair Values of Derivative Instruments

The following table presents our derivative instruments:

(In millions)	Derivative Assets	Derivative Liabilities	Derivative Assets	Derivative Liabilities
		June 30, 2022		June 30, 2021
Designated as Hedging Instruments				
Foreign exchange contracts	\$ 0	\$ (77)	\$ 76	\$ (8)
Interest rate contracts	3	0	40	0
Not Designated as Hedging Instruments				
Foreign exchange contracts	333	(362)	227	(291)
Other contracts	20	(112)	56	(36)
Gross amounts of derivatives	356	(551)	399	(335)
Gross amounts of derivatives offset in the balance sheet	(130)	133	(141)	142
Cash collateral received	0	(75)	0	(42)
Net amounts of derivatives	\$ 226	\$ (493)	\$ 258	\$ (235)
Reported as				
Short-term investments	\$ 8	\$ 0	\$ 78	\$ 0
Other current assets	218	0	137	0
Other long-term assets	0	0	43	0
Other current liabilities	0	(298)	0	(182)
Other long-term liabilities	0	(195)	0	(53)
Total	\$ 226	\$ (493)	\$ 258	\$ (235)

Gross derivative assets and liabilities subject to legally enforceable master netting agreements for which we have elected to offset were \$ 343 million and \$550 million, respectively, as of June 30, 2022, and \$ 395 million and \$335 million, respectively, as of June 30, 2021.

The following table presents the fair value of our derivatives instruments on a gross basis:

(In millions)	Level 1	Level 2	Level 3	Total
June 30, 2022				
Derivative assets	\$ 1	\$ 349	\$ 6	\$ 356
Derivative liabilities	0	(551)	0	(551)
June 30, 2021				
Derivative assets	0	396	3	399
Derivative liabilities	0	(335)	0	(335)

Gains (losses) on derivative instruments recognized in other income (expense), net were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Designated as Fair Value Hedging Instruments			
Foreign exchange contracts			
Derivatives	\$ 49	\$ 193	\$ 1
Hedged items	(50)	(188)	3
Excluded from effectiveness assessment	4	30	139
Interest rate contracts			
Derivatives	(92)	(37)	93
Hedged items	108	53	(93)
Designated as Cash Flow Hedging Instruments			
Foreign exchange contracts			
Amount reclassified from accumulated other comprehensive income	(79)	17	0
Not Designated as Hedging Instruments			
Foreign exchange contracts	383	27	(123)
Other contracts	(72)	9	50

Gains (losses), net of tax, on derivative instruments recognized in our consolidated comprehensive income statements were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Designated as Cash Flow Hedging Instruments			
Foreign exchange contracts			
Included in effectiveness assessment	\$ (57)	\$ 34	\$ (38)

NOTE 6 — INVENTORIES

The components of inventories were as follows:

(In millions)

June 30,	2022	2021
Raw materials	\$ 1,144	\$ 1,190
Work in process	82	79
Finished goods	2,516	1,367
Total	<u>\$ 3,742</u>	<u>\$ 2,636</u>

NOTE 7 — PROPERTY AND EQUIPMENT

The components of property and equipment were as follows:

(In millions)

June 30,	2022	2021
Land	\$ 4,734	\$ 3,660
Buildings and improvements	55,014	43,928
Leasehold improvements	7,819	6,884
Computer equipment and software	60,631	51,250
Furniture and equipment	5,860	5,344
Total, at cost	134,058	111,066
Accumulated depreciation	(59,660)	(51,351)
Total, net	\$ 74,398	\$ 59,715

During fiscal years 2022, 2021, and 2020, depreciation expense was \$ 12.6 billion, \$9.3 billion, and \$10.7 billion, respectively. We have committed \$ 8.5 billion, primarily related to datacenters, for the construction of new buildings, building improvements, and leasehold improvements as of June 30, 2022.

NOTE 8 — BUSINESS COMBINATIONS

Nuance Communications, Inc.

On March 4, 2022, we completed our acquisition of Nuance Communications, Inc. ("Nuance") for a total purchase price of \$ 18.8 billion, consisting primarily of cash. Nuance is a cloud and artificial intelligence ("AI") software provider with healthcare and enterprise AI experience, and the acquisition will build on our industry-specific cloud offerings. The financial results of Nuance have been included in our consolidated financial statements since the date of the acquisition. Nuance is reported as part of our Intelligent Cloud segment.

The purchase price allocation as of the date of acquisition was based on a preliminary valuation and is subject to revision as more detailed analyses are completed and additional information about the fair value of assets acquired and liabilities assumed becomes available.

The major classes of assets and liabilities to which we have preliminarily allocated the purchase price were as follows:

(In millions)

Goodwill (a)	\$ 16,308
Intangible assets	4,365
Other assets	59
Other liabilities (b)	(1,971)
Total	\$ 18,761

- (a) Goodwill was assigned to our Intelligent Cloud segment and was primarily attributed to increased synergies that are expected to be achieved from the integration of Nuance. None of the goodwill is expected to be deductible for income tax purposes.
- (b) Includes \$986 million of convertible senior notes issued by Nuance in 2015 and 2017, of which \$ 985 million was redeemed prior to June 30, 2022. The remaining \$1 million of notes are redeemable through their respective maturity dates and are included in other current liabilities on our consolidated balance sheets as of June 30, 2022.

Following are the details of the purchase price allocated to the intangible assets acquired:

(In millions, except average life)	Amount	Weighted Average Life
Customer-related	\$ 2,610	9 years
Technology-based	1,540	5 years
Marketing-related	215	4 years
Total	<u>\$ 4,365</u>	7 years

ZeniMax Media Inc.

On March 9, 2021, we completed our acquisition of ZeniMax Media Inc. ("ZeniMax"), the parent company of Bethesda Softworks LLC ("Bethesda"), for a total purchase price of \$8.1 billion, consisting primarily of cash. The purchase price included \$ 766 million of cash and cash equivalents acquired. Bethesda is one of the largest, privately held game developers and publishers in the world, and brings a broad portfolio of games, technology, and talent to Xbox. The financial results of ZeniMax have been included in our consolidated financial statements since the date of the acquisition. ZeniMax is reported as part of our More Personal Computing segment.

The allocation of the purchase price to goodwill was completed as of December 31, 2021. The major classes of assets and liabilities to which we have allocated the purchase price were as follows:

(In millions)	
Cash and cash equivalents	\$ 766
Goodwill	5,510
Intangible assets	1,968
Other assets	121
Other liabilities	(244)
Total	<u>\$ 8,121</u>

Goodwill was assigned to our More Personal Computing segment. The goodwill was primarily attributed to increased synergies that are expected to be achieved from the integration of ZeniMax. None of the goodwill is expected to be deductible for income tax purposes.

Following are details of the purchase price allocated to the intangible assets acquired:

(In millions, except average life)	Amount	Weighted Average Life
Technology-based	\$ 1,341	4 years
Marketing-related	627	11 years
Total	<u>\$ 1,968</u>	6 years

Activision Blizzard, Inc.

On January 18, 2022, we entered into a definitive agreement to acquire Activision Blizzard, Inc. ("Activision Blizzard") for \$95.00 per share in an all-cash transaction valued at \$68.7 billion, inclusive of Activision Blizzard's net cash. Activision Blizzard is a leader in game development and an interactive entertainment content publisher. The acquisition will accelerate the growth in our gaming business across mobile, PC, console, and cloud and will provide building blocks for the metaverse. The acquisition has been approved by Activision Blizzard's shareholders, and we expect it to close in fiscal year 2023, subject to the satisfaction of certain regulatory approvals and other customary closing conditions.

NOTE 9 — GOODWILL

Changes in the carrying amount of goodwill were as follows:

(In millions)	June 30, 2020	Acquisitions	Other	June 30, 2021	Acquisitions	Other	June 30, 2022
Productivity and Business							
Processes	\$ 24,190	\$ 0	\$ 127	\$ 24,317	\$ 599	\$ (105)	\$ 24,811
Intelligent Cloud	12,697	505	54	13,256	16,879(b)	47 (b)	30,182
More Personal Computing	6,464	5,556(a)	118(a)	12,138	648	(255)	12,531
Total	\$ 43,351	\$ 6,061	\$ 299	\$ 49,711	\$ 18,126	\$ (313)	\$ 67,524

(a) Includes goodwill of \$5.5 billion related to ZeniMax. See Note 8 – Business Combinations for further information .

(b) Includes goodwill of \$16.3 billion related to Nuance. See Note 8 – Business Combinations for further information .

The measurement periods for the valuation of assets acquired and liabilities assumed end as soon as information on the facts and circumstances that existed as of the acquisition dates becomes available, but do not exceed 12 months. Adjustments in purchase price allocations may require a change in the amounts allocated to goodwill during the periods in which the adjustments are determined.

Any change in the goodwill amounts resulting from foreign currency translations and purchase accounting adjustments are presented as “Other” in the table above. Also included in “Other” are business dispositions and transfers between segments due to reorganizations, as applicable.

Goodwill Impairment

We test goodwill for impairment annually on May 1 at the reporting unit level, primarily using a discounted cash flow methodology with a peer-based, risk-adjusted weighted average cost of capital. We believe use of a discounted cash flow approach is the most reliable indicator of the fair values of the businesses.

No instances of impairment were identified in our May 1, 2022, May 1, 2021, or May 1, 2020 tests. As of June 30, 2022 and 2021, accumulated goodwill impairment was \$11.3 billion.

NOTE 10 — INTANGIBLE ASSETS

The components of intangible assets, all of which are finite-lived, were as follows:

(In millions)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
June 30,			2022			2021
Technology-based	\$ 11,277	\$ (6,958)	\$ 4,319	\$ 9,779	\$ (7,007)	\$ 2,772
Customer-related	7,342	(3,171)	4,171	4,958	(2,859)	2,099
Marketing-related	4,942	(2,143)	2,799	4,792	(1,878)	2,914
Contract-based	16	(7)	9	446	(431)	15
Total	\$ 23,577(a)	\$ (12,279)	\$ 11,298	\$ 19,975(b)	\$ (12,175)	\$ 7,800

(a) Includes intangible assets of \$4.4 billion related to Nuance. See Note 8 – Business Combinations for further information .

(b) Includes intangible assets of \$2.0 billion related to ZeniMax. See Note 8 – Business Combinations for further information .

No material impairments of intangible assets were identified during fiscal years 2022, 2021, or 2020. We estimate that we have no significant residual value related to our intangible assets.

The components of intangible assets acquired during the periods presented were as follows:

(In millions)	Amount	Weighted Average Life	Amount	Weighted Average Life
Year Ended June 30,	2022		2021	
Technology-based	\$ 2,611	4 years	\$ 1,628	4 years
Customer-related	2,837	9 years	96	4 years
Marketing-related	233	4 years	625	6 years
Contract-based	0	0 years	10	3 years
Total	\$ 5,681	7 years	\$ 2,359	5 years

Intangible assets amortization expense was \$2.0 billion, \$1.6 billion, and \$1.6 billion for fiscal years 2022, 2021, and 2020, respectively.

The following table outlines the estimated future amortization expense related to intangible assets held as of June 30, 2022:

(In millions)	
Year Ending June 30,	
2023	\$ 2,654
2024	2,385
2025	1,631
2026	1,227
2027	809
Thereafter	2,592
Total	\$ 11,298

NOTE 11 — DEBT

The components of debt were as follows:

(In millions, issuance by calendar year)	Maturities (calendar year)	Stated Interest Rate	Effective Interest Rate	June 30, 2022	June 30, 2021
2009 issuance of \$3.8 billion (a)	2039	5.20%	5.24%	\$ 520	\$ 520
2010 issuance of \$4.8 billion (a)	2040	4.50%	4.57%	486	486
2011 issuance of \$2.3 billion (a)	2041	5.30%	5.36%	718	718
2012 issuance of \$2.3 billion (a)	2022 – 2042	2.13% – 3.50%	2.24% – 3.57%	1,204	1,204
2013 issuance of \$5.2 billion (a)	2023 – 2043	2.38% – 4.88%	2.47% – 4.92%	2,814	2,814
2013 issuance of €4.1 billion	2028 – 2033	2.63% – 3.13%	2.69% – 3.22%	2,404	4,803
2015 issuance of \$23.8 billion (a)	2022 – 2055	2.65% – 4.75%	2.72% – 4.78%	10,805	12,305
2016 issuance of \$19.8 billion (a)	2023 – 2056	2.00% – 3.95%	2.10% – 4.03%	9,430	12,180
2017 issuance of \$17.0 billion (a)	2024 – 2057	2.88% – 4.50%	3.04% – 4.53%	8,945	10,695
2020 issuance of \$10.0 billion (a)	2050 – 2060	2.53% – 2.68%	2.53% – 2.68%	10,000	10,000
2021 issuance of \$8.2 billion (a)	2052 – 2062	2.92% – 3.04%	2.92% – 3.04%	8,185	8,185
Total face value				55,511	63,910
Unamortized discount and issuance costs				(471)	(511)
Hedge fair value adjustments (b)				(68)	40
Premium on debt exchange (a)				(5,191)	(5,293)
Total debt				49,781	58,146
Current portion of long-term debt				(2,749)	(8,072)
Long-term debt				\$ 47,032	\$ 50,074

- (a) In March 2021 and June 2020, we exchanged a portion of our existing debt at a premium for cash and new debt with longer maturities. The premiums are amortized over the terms of the new debt.
- (b) Refer to Note 5 – Derivatives for further information on the interest rate swaps related to fixed-rate debt.

As of June 30, 2022 and 2021, the estimated fair value of long-term debt, including the current portion, was \$ 50.9 billion and \$70.0 billion, respectively. The estimated fair values are based on Level 2 inputs.

Debt in the table above is comprised of senior unsecured obligations and ranks equally with our other outstanding obligations. Interest is paid semi-annually, except for the Euro-denominated debt, which is paid annually. Cash paid for interest on our debt for fiscal years 2022, 2021, and 2020 was \$ 1.9 billion, \$2.0 billion, and \$2.4 billion, respectively.

The following table outlines maturities of our long-term debt, including the current portion, as of June 30, 2022:

(In millions)	
Year Ending June 30,	
2023	\$ 2,750
2024	5,250
2025	2,250
2026	3,000
2027	8,000
Thereafter	34,261
Total	\$ 55,511

NOTE 12 — INCOME TAXES

Provision for Income Taxes

The components of the provision for income taxes were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Current Taxes			
U.S. federal	\$ 8,329	\$ 3,285	\$ 3,537
U.S. state and local	1,679	1,229	763
Foreign	6,672	5,467	4,444
Current taxes	\$ 16,680	\$ 9,981	\$ 8,744
Deferred Taxes			
U.S. federal	\$ (4,815)	\$ 25	\$ 58
U.S. state and local	(1,062)	(204)	(6)
Foreign	175	29	(41)
Deferred taxes	\$ (5,702)	\$ (150)	\$ 11
Provision for income taxes	\$ 10,978	\$ 9,831	\$ 8,755

U.S. and foreign components of income before income taxes were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
U.S.	\$ 47,837	\$ 34,972	\$ 24,116
Foreign	35,879	36,130	28,920
Income before income taxes	\$ 83,716	\$ 71,102	\$ 53,036

Effective Tax Rate

The items accounting for the difference between income taxes computed at the U.S. federal statutory rate and our effective rate were as follows:

Year Ended June 30,	2022	2021	2020
Federal statutory rate	21.0%	21.0%	21.0%
Effect of:			
Foreign earnings taxed at lower rates	(1.3)%	(2.7)%	(3.7)%
Impact of intangible property transfers	(3.9)%	0%	0%
Foreign-derived intangible income deduction	(1.1)%	(1.3)%	(1.1)%
State income taxes, net of federal benefit	1.4%	1.4%	1.3%
Research and development credit	(0.9)%	(0.9)%	(1.1)%
Excess tax benefits relating to stock-based compensation	(1.9)%	(2.4)%	(2.2)%
Interest, net	0.5%	0.5%	1.0%
Other reconciling items, net	(0.7)%	(1.8)%	1.3%
Effective rate	13.1%	13.8%	16.5%

In the first quarter of fiscal year 2022, we transferred certain intangible properties from our Puerto Rico subsidiary to the U.S. The transfer of intangible properties resulted in a \$3.3 billion net income tax benefit in the first quarter of fiscal year 2022, as the value of future U.S. tax deductions exceeds the current tax liability from the U.S. global intangible low-taxed income ("GILTI") tax.

We have historically paid India withholding taxes on software sales through distributor withholding and tax audit assessments in India. In March 2021, the India Supreme Court ruled favorably in the case of Engineering Analysis Centre of Excellence Private Limited vs The Commissioner of Income Tax for companies in 86 separate appeals, some dating back to 2012, holding that software sales are not subject to India withholding taxes. Although we were not a party to the appeals, our software sales in India were determined to be not subject to withholding taxes. Therefore, we recorded a net income tax benefit of \$620 million in the third quarter of fiscal year 2021 to reflect the results of the India Supreme Court decision impacting fiscal year 1996 through fiscal year 2016.

The decrease from the federal statutory rate in fiscal year 2022 is primarily due to the net income tax benefit related to the transfer of intangible properties, earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations center in Ireland, and tax benefits relating to stock-based compensation. The decrease from the federal statutory rate in fiscal year 2021 is primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations centers in Ireland and Puerto Rico, tax benefits relating to stock-based compensation, and tax benefits from the India Supreme Court decision on withholding taxes. The decrease from the federal statutory rate in fiscal year 2020 is primarily due to earnings taxed at lower rates in foreign jurisdictions resulting from producing and distributing our products and services through our foreign regional operations centers in Ireland and Puerto Rico, and tax benefits relating to stock-based compensation. In fiscal years 2022, 2021, and 2020, our foreign regional operating centers in Ireland and Puerto Rico, which are taxed at rates lower than the U.S. rate, generated 71%, 82%, and 86% of our foreign income before tax. Other reconciling items, net consists primarily of tax credits and GILTI tax, and in fiscal year 2021, includes tax benefits from the India Supreme Court decision on withholding taxes. In fiscal years 2022, 2021, and 2020, there were no individually significant other reconciling items.

The decrease in our effective tax rate for fiscal year 2022 compared to fiscal year 2021 was primarily due to a \$ 3.3 billion net income tax benefit in the first quarter of fiscal year 2022 related to the transfer of intangible properties, offset in part by changes in the mix of our income before income taxes between the U.S. and foreign countries, as well as tax benefits in the prior year from the India Supreme Court decision on withholding taxes, an agreement between the U.S. and India tax authorities related to transfer pricing, and final Tax Cuts and Jobs Act ("TCJA") regulations. The decrease in our effective tax rate for fiscal year 2021 compared to fiscal year 2020 was primarily due to tax benefits from the India Supreme Court decision on withholding taxes, an agreement between the U.S. and India tax authorities related to transfer pricing, final TCJA regulations, and an increase in tax benefits relating to stock-based compensation.

The components of the deferred income tax assets and liabilities were as follows:

(In millions)

June 30,	2022	2021
Deferred Income Tax Assets		
Stock-based compensation expense	\$ 601	\$ 502
Accruals, reserves, and other expenses	2,874	2,960
Loss and credit carryforwards	1,546	1,090
Amortization	10,656	6,346
Leasing liabilities	4,557	4,060
Unearned revenue	2,876	2,659
Other	461	319
Deferred income tax assets	23,571	17,936
Less valuation allowance	(1,012)	(769)
Deferred income tax assets, net of valuation allowance	\$ 22,559	\$ 17,167
Deferred Income Tax Liabilities		
Book/tax basis differences in investments and debt	\$ (174)	\$ (2,381)
Leasing assets	(4,291)	(3,834)
Depreciation	(1,602)	(1,010)
Deferred tax on foreign earnings	(3,104)	(2,815)
Other	(103)	(144)
Deferred income tax liabilities	\$ (9,274)	\$ (10,184)
Net deferred income tax assets	\$ 13,285	\$ 6,983
Reported As		
Other long-term assets	\$ 13,515	\$ 7,181
Long-term deferred income tax liabilities	(230)	(198)
Net deferred income tax assets	\$ 13,285	\$ 6,983

Deferred income tax balances reflect the effects of temporary differences between the carrying amounts of assets and liabilities and their tax bases and are stated at enacted tax rates expected to be in effect when the taxes are paid or recovered.

As of June 30, 2022, we had federal, state, and foreign net operating loss carryforwards of \$ 318 million, \$1.3 billion, and \$2.1 billion, respectively. The federal and state net operating loss carryforwards will expire in various years from fiscal 2023 through 2042, if not utilized. The majority of our foreign net operating loss carryforwards do not expire. Certain acquired net operating loss carryforwards are subject to an annual limitation but are expected to be realized with the exception of those which have a valuation allowance. As of June 30, 2022, we had \$1.3 billion federal capital loss carryforwards for U.S. tax purposes from our acquisition of Nuance. The federal capital loss carryforwards are subject to an annual limitation and will expire in various years from fiscal 2023 through 2025.

The valuation allowance disclosed in the table above relates to the foreign net operating loss carryforwards, federal capital loss carryforwards, and other net deferred tax assets that may not be realized.

Income taxes paid, net of refunds, were \$ 16.0 billion, \$13.4 billion, and \$12.5 billion in fiscal years 2022, 2021, and 2020, respectively.

Uncertain Tax Positions

Gross unrecognized tax benefits related to uncertain tax positions as of June 30, 2022, 2021, and 2020, were \$ 15.6 billion, \$14.6 billion, and \$13.8 billion, respectively, which were primarily included in long-term income taxes in our consolidated balance sheets. If recognized, the resulting tax benefit would affect our effective tax rates for fiscal years 2022, 2021, and 2020 by \$13.3 billion, \$12.5 billion, and \$12.1 billion, respectively.

As of June 30, 2022, 2021, and 2020, we had accrued interest expense related to uncertain tax positions of \$ 4.3 billion, \$4.3 billion, and \$4.0 billion, respectively, net of income tax benefits. The provision for income taxes for fiscal years 2022, 2021, and 2020 included interest expense related to uncertain tax positions of \$36 million, \$274 million, and \$579 million, respectively, net of income tax benefits.

The aggregate changes in the gross unrecognized tax benefits related to uncertain tax positions were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Beginning unrecognized tax benefits	\$ 14,550	\$ 13,792	\$ 13,146
Decreases related to settlements	(317)	(195)	(31)
Increases for tax positions related to the current year	1,145	790	647
Increases for tax positions related to prior years	461	461	366
Decreases for tax positions related to prior years	(246)	(297)	(331)
Decreases due to lapsed statutes of limitations	0	(1)	(5)
Ending unrecognized tax benefits	\$ 15,593	\$ 14,550	\$ 13,792

We settled a portion of the Internal Revenue Service ("IRS") audit for tax years 2004 to 2006 in fiscal year 2011. In February 2012, the IRS withdrew its 2011 Revenue Agents Report related to unresolved issues for tax years 2004 to 2006 and reopened the audit phase of the examination. We also settled a portion of the IRS audit for tax years 2007 to 2009 in fiscal year 2016, and a portion of the IRS audit for tax years 2010 to 2013 in fiscal year 2018. In the second quarter of fiscal year 2021, we settled an additional portion of the IRS audits for tax years 2004 to 2013 and made a payment of \$1.7 billion, including tax and interest. We remain under audit for tax years 2004 to 2017.

As of June 30, 2022, the primary unresolved issues for the IRS audits relate to transfer pricing, which could have a material impact in our consolidated financial statements when the matters are resolved. We believe our allowances for income tax contingencies are adequate. We have not received a proposed assessment for the unresolved key transfer pricing issues and do not expect a final resolution of these issues in the next 12 months. Based on the information currently available, we do not anticipate a significant increase or decrease to our tax contingencies for these issues within the next 12 months.

We are subject to income tax in many jurisdictions outside the U.S. Our operations in certain jurisdictions remain subject to examination for tax years 1996 to 2021, some of which are currently under audit by local tax authorities. The resolution of each of these audits is not expected to be material to our consolidated financial statements.

NOTE 13 — UNEARNED REVENUE

Unearned revenue by segment was as follows:

(In millions)

June 30,	2022	2021
Productivity and Business Processes	\$ 24,558	\$ 22,120
Intelligent Cloud	19,371	17,710
More Personal Computing	4,479	4,311
Total	\$ 48,408	\$ 44,141

Changes in unearned revenue were as follows:

(In millions)

Year Ended June 30, 2022	
Balance, beginning of period	\$ 44,141
Deferral of revenue	110,455
Recognition of unearned revenue	(106,188)
Balance, end of period	\$ 48,408

Revenue allocated to remaining performance obligations, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods, was \$193 billion as of June 30, 2022, of which \$189 billion is related to the commercial portion of revenue. We expect to recognize approximately 45% of this revenue over the next 12 months and the remainder thereafter.

NOTE 14 — LEASES

We have operating and finance leases for datacenters, corporate offices, research and development facilities, Microsoft Experience Centers, and certain equipment. Our leases have remaining lease terms of 1 year to 19 years, some of which include options to extend the leases for up to 5 years, and some of which include options to terminate the leases within 1 year.

The components of lease expense were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Operating lease cost	\$ 2,461	\$ 2,127	\$ 2,043
Finance lease cost:			
Amortization of right-of-use assets	\$ 980	\$ 921	\$ 611
Interest on lease liabilities	429	386	336
Total finance lease cost	\$ 1,409	\$ 1,307	\$ 947

Supplemental cash flow information related to leases was as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash flows from operating leases	\$ 2,368	\$ 2,052	\$ 1,829
Operating cash flows from finance leases	429	386	336
Financing cash flows from finance leases	896	648	409
Right-of-use assets obtained in exchange for lease obligations:			
Operating leases	5,268	4,380	3,677
Finance leases	4,234	3,290	3,467

Supplemental balance sheet information related to leases was as follows:

(In millions, except lease term and discount rate)

June 30,	2022	2021
Operating Leases		
Operating lease right-of-use assets	\$ 13,148	\$ 11,088
Other current liabilities	\$ 2,228	\$ 1,962
Operating lease liabilities	11,489	9,629
Total operating lease liabilities	\$ 13,717	\$ 11,591
Finance Leases		
Property and equipment, at cost	\$ 17,388	\$ 14,107
Accumulated depreciation	(3,285)	(2,306)
Property and equipment, net	\$ 14,103	\$ 11,801
Other current liabilities	\$ 1,060	\$ 791
Other long-term liabilities	13,842	11,750
Total finance lease liabilities	\$ 14,902	\$ 12,541
Weighted Average Remaining Lease Term		
Operating leases	8 years	8 years
Finance leases	12 years	12 years
Weighted Average Discount Rate		
Operating leases	2.1%	2.2%
Finance leases	3.1%	3.4%

The following table outlines maturities of our lease liabilities as of June 30, 2022:

(In millions)

Year Ending June 30,	Operating Leases	Finance Leases
2023	\$ 2,456	\$ 1,477
2024	2,278	1,487
2025	1,985	1,801
2026	1,625	1,483
2027	1,328	1,489
Thereafter	5,332	9,931
Total lease payments	15,004	17,668
Less imputed interest	(1,287)	(2,766)
Total	\$ 13,717	\$ 14,902

As of June 30, 2022, we have additional operating and finance leases, primarily for datacenters, that have not yet commenced of \$ 7.2 billion and \$8.8 billion, respectively. These operating and finance leases will commence between fiscal year 2023 and fiscal year 2028 with lease terms of 1 year to 18 years.

NOTE 15 — CONTINGENCIES

Antitrust Litigation and Claims

China State Administration for Market Regulation Investigation

In 2014, Microsoft was informed that China's State Agency for Market Regulation ("SAMR") (formerly State Administration for Industry and Commerce) had begun a formal investigation relating to China's Anti-Monopoly Law, and the SAMR conducted onsite inspections of Microsoft offices in Beijing, Shanghai, Guangzhou, and Chengdu. In 2019, the SAMR presented preliminary views as to certain possible violations of China's Anti-Monopoly Law.

Product-Related Litigation

U.S. Cell Phone Litigation

Microsoft Mobile Oy, a subsidiary of Microsoft, along with other handset manufacturers and network operators, is a defendant in 46 lawsuits, including 45 lawsuits filed in the Superior Court for the District of Columbia by individual plaintiffs who allege that radio emissions from cellular handsets caused their brain tumors and other adverse health effects. We assumed responsibility for these claims in our agreement to acquire Nokia's Devices and Services business and have been substituted for the Nokia defendants. Nine of these cases were filed in 2002 and are consolidated for certain pre-trial proceedings; the remaining cases are stayed. In a separate 2009 decision, the Court of Appeals for the District of Columbia held that adverse health effect claims arising from the use of cellular handsets that operate within the U.S. Federal Communications Commission radio frequency emission guidelines ("FCC Guidelines") are pre-empted by federal law. The plaintiffs allege that their handsets either operated outside the FCC Guidelines or were manufactured before the FCC Guidelines went into effect. The lawsuits also allege an industry-wide conspiracy to manipulate the science and testing around emission guidelines.

In 2013, the defendants in the consolidated cases moved to exclude the plaintiffs' expert evidence of general causation on the basis of flawed scientific methodologies. In 2014, the trial court granted in part and denied in part the defendants' motion to exclude the plaintiffs' general causation experts. The defendants filed an interlocutory appeal to the District of Columbia Court of Appeals challenging the standard for evaluating expert scientific evidence. In October 2016, the Court of Appeals issued its decision adopting the standard advocated by the defendants and remanding the cases to the trial court for further proceedings under that standard. The plaintiffs have filed supplemental expert evidence, portions of which the defendants have moved to strike. In August 2018, the trial court issued an order striking portions of the plaintiffs' expert reports. A hearing on general causation is scheduled for September of 2022.

Other Contingencies

We also are subject to a variety of other claims and suits that arise from time to time in the ordinary course of our business. Although management currently believes that resolving claims against us, individually or in aggregate, will not have a material adverse impact in our consolidated financial statements, these matters are subject to inherent uncertainties and management's view of these matters may change in the future.

As of June 30, 2022, we accrued aggregate legal liabilities of \$ 364 million. While we intend to defend these matters vigorously, adverse outcomes that we estimate could reach approximately \$600 million in aggregate beyond recorded amounts are reasonably possible. Were unfavorable final outcomes to occur, there exists the possibility of a material adverse impact in our consolidated financial statements for the period in which the effects become reasonably estimable.

NOTE 16 — STOCKHOLDERS' EQUITY

Shares Outstanding

Shares of common stock outstanding were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Balance, beginning of year	7,519	7,571	7,643
Issued	40	49	54
Repurchased	(95)	(101)	(126)
Balance, end of year	7,464	7,519	7,571

Share Repurchases

On September 20, 2016, our Board of Directors approved a share repurchase program authorizing up to \$ 40.0 billion in share repurchases. This share repurchase program commenced in December 2016 and was completed in February 2020.

On September 18, 2019, our Board of Directors approved a share repurchase program authorizing up to \$ 40.0 billion in share repurchases. This share repurchase program commenced in February 2020 and was completed in November 2021.

On September 14, 2021, our Board of Directors approved a share repurchase program authorizing up to \$ 60.0 billion in share repurchases. This share repurchase program commenced in November 2021, following completion of the program approved on September 18, 2019, has no expiration date, and may be terminated at any time. As of June 30, 2022, \$40.7 billion remained of this \$60.0 billion share repurchase program.

We repurchased the following shares of common stock under the share repurchase programs:

(In millions)	Shares	Amount	Shares	Amount	Shares	Amount
Year Ended June 30,	2022		2021		2020	
First Quarter	21	\$ 6,200	25	\$ 5,270	29	\$ 4,000
Second Quarter	20	6,233	27	5,750	32	4,600
Third Quarter	26	7,800	25	5,750	37	6,000
Fourth Quarter	28	7,800	24	6,200	28	5,088
Total	95	\$ 28,033	101	\$ 22,970	126	\$ 19,688

All repurchases were made using cash resources. Shares repurchased during the fourth and third quarters of fiscal year 2022 were under the share repurchase program approved on September 14, 2021. Shares repurchased during the second quarter of fiscal year 2022 were under the share repurchase programs approved on both September 14, 2021 and September 18, 2019. Shares repurchased during the first quarter of fiscal year 2022, fiscal year 2021, and the fourth quarter of fiscal year 2020 were under the share repurchase program approved on September 18, 2019. Shares repurchased during the third quarter of fiscal year 2020 were under the share repurchase programs approved on both September 20, 2016 and September 18, 2019. All other shares repurchased were under the share repurchase program approved on September 20, 2016. The above table excludes shares repurchased to settle employee tax withholding related to the vesting of stock awards of \$4.7 billion, \$4.4 billion, and \$3.3 billion for fiscal years 2022, 2021, and 2020, respectively.

Dividends

Our Board of Directors declared the following dividends:

Declaration Date	Record Date	Payment Date	Dividend Per Share		Amount
Fiscal Year 2022					(In millions)
September 14, 2021	November 18, 2021	December 9, 2021	\$	0.62	\$ 4,652
December 7, 2021	February 17, 2022	March 10, 2022		0.62	4,645
March 14, 2022	May 19, 2022	June 9, 2022		0.62	4,632
June 14, 2022	August 18, 2022	September 8, 2022		0.62	4,627
Total			\$	2.48	\$ 18,556
Fiscal Year 2021					
September 15, 2020	November 19, 2020	December 10, 2020	\$	0.56	\$ 4,230
December 2, 2020	February 18, 2021	March 11, 2021		0.56	4,221
March 16, 2021	May 20, 2021	June 10, 2021		0.56	4,214
June 16, 2021	August 19, 2021	September 9, 2021		0.56	4,206
Total			\$	2.24	\$ 16,871

The dividend declared on June 14, 2022 was included in other current liabilities as of June 30, 2022.

NOTE 17 — ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

The following table summarizes the changes in accumulated other comprehensive income (loss) by component :

(In millions)

Year Ended June 30,	2022	2021	2020
Derivatives			
Balance, beginning of period	\$ (19)	\$ (38)	\$ 0
Unrealized gains (losses), net of tax of \$(15), \$9, and \$(10)	(57)	34	(38)
Reclassification adjustments for (gains) losses included in other income (expense), net	79	(17)	0
Tax expense (benefit) included in provision for income taxes	(16)	2	0
Amounts reclassified from accumulated other comprehensive income (loss)	63	(15)	0
Net change related to derivatives, net of tax of \$1, \$7, and \$(10)	6	19	(38)
Balance, end of period	\$ (13)	\$ (19)	\$ (38)
Investments			
Balance, beginning of period	\$ 3,222	\$ 5,478	\$ 1,488
Unrealized gains (losses), net of tax of \$(1,440), \$(589), and \$1,057	(5,405)	(2,216)	3,987
Reclassification adjustments for (gains) losses included in other income (expense), net	57	(63)	4
Tax expense (benefit) included in provision for income taxes	(12)	13	(1)
Amounts reclassified from accumulated other comprehensive income (loss)	45	(50)	3
Net change related to investments, net of tax of \$(1,428), \$(602), and \$1,058	(5,360)	(2,266)	3,990
Cumulative effect of accounting changes	0	10	0
Balance, end of period	\$ (2,138)	\$ 3,222	\$ 5,478
Translation Adjustments and Other			
Balance, beginning of period	\$ (1,381)	\$ (2,254)	\$ (1,828)
Translation adjustments and other, net of tax of \$0, \$(9), and \$1	(1,146)	873	(426)
Balance, end of period	\$ (2,527)	\$ (1,381)	\$ (2,254)
Accumulated other comprehensive income (loss), end of period	\$ (4,678)	\$ 1,822	\$ 3,186

NOTE 18 — EMPLOYEE STOCK AND SAVINGS PLANS

We grant stock-based compensation to employees and directors. Awards that expire or are canceled without delivery of shares generally become available for issuance under the plans. We issue new shares of Microsoft common stock to satisfy vesting of awards granted under our stock plans. We also have an ESPP for all eligible employees.

Stock-based compensation expense and related income tax benefits were as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Stock-based compensation expense	\$ 7,502	\$ 6,118	\$ 5,289
Income tax benefits related to stock-based compensation	1,293	1,065	938

Stock Plans

Stock awards entitle the holder to receive shares of Microsoft common stock as the award vests. Stock awards generally vest over a service period of four years or five years.

Executive Incentive Plan

Under the Executive Incentive Plan, the Compensation Committee approves stock awards to executive officers and certain senior executives. RSUs generally vest ratably over a service period of four years. PSUs generally vest over a performance period of three years. The number of shares the PSU holder receives is based on the extent to which the corresponding performance goals have been achieved.

Activity for All Stock Plans

The fair value of stock awards was estimated on the date of grant using the following assumptions:

Year ended June 30,	2022	2021	2020
Dividends per share (quarterly amounts)	\$ 0.56–0.62	\$ 0.51–0.56	\$ 0.46–0.51
Interest rates	0.03%–3.6%	0.01%–1.5%	0.1%–2.2%

During fiscal year 2022, the following activity occurred under our stock plans:

	Shares	Weighted Average Grant-Date Fair Value
	(In millions)	
Stock Awards		
Nonvested balance, beginning of year	100	\$ 152.51
Granted (a)	50	291.22
Vested	(47)	143.10
Forfeited	(10)	189.88
Nonvested balance, end of year	93	\$ 227.59

(a) Includes 1 million, 2 million, and 2 million of PSUs granted at target and performance adjustments above target levels for fiscal years 2022, 2021, and 2020, respectively.

As of June 30, 2022, there was approximately \$ 16.7 billion of total unrecognized compensation costs related to stock awards. These costs are expected to be recognized over a weighted average period of three years. The weighted average grant-date fair value of stock awards granted was \$ 291.22, \$221.13, and \$140.49 for fiscal years 2022, 2021, and 2020, respectively. The fair value of stock awards vested was \$ 14.1 billion, \$13.4 billion, and \$10.1 billion, for fiscal years 2022, 2021, and 2020, respectively. As of June 30, 2022, an aggregate of 211 million shares were authorized for future grant under our stock plans.

Employee Stock Purchase Plan

We have an ESPP for all eligible employees. Shares of our common stock may be purchased by employees at three-month intervals at 90% of the fair market value on the last trading day of each three-month period. Employees may purchase shares having a value not exceeding 15% of their gross compensation during an offering period. Under the terms of the ESPP that were approved in 2012, the plan was set to terminate on December 31, 2022. At our 2021 Annual Shareholders Meeting, our shareholders approved a successor ESPP with a January 1, 2022 effective date and ten-year expiration of December 31, 2031. No additional shares were requested at this meeting.

Employees purchased the following shares during the periods presented:

(Shares in millions)	2022	2021	2020
Year Ended June 30,			
Shares purchased	7	8	9
Average price per share	\$ 259.55	\$ 207.88	\$ 142.22

As of June 30, 2022, 81 million shares of our common stock were reserved for future issuance through the ESPP.

Savings Plans

We have savings plans in the U.S. that qualify under Section 401(k) of the Internal Revenue Code, and a number of savings plans in international locations. Eligible U.S. employees may contribute a portion of their salary into the savings plans, subject to certain limitations. We match a portion of each dollar a participant contributes into the plans. Employer-funded retirement benefits for all plans were \$1.4 billion, \$1.2 billion, and \$1.0 billion in fiscal years 2022, 2021, and 2020, respectively, and were expensed as contributed.

NOTE 19 — SEGMENT INFORMATION AND GEOGRAPHIC DATA

In its operation of the business, management, including our chief operating decision maker, who is also our Chief Executive Officer, reviews certain financial information, including segmented internal profit and loss statements prepared on a basis not consistent with GAAP. During the periods presented, we reported our financial performance based on the following segments: Productivity and Business Processes, Intelligent Cloud, and More Personal Computing.

Our reportable segments are described below.

Productivity and Business Processes

Our Productivity and Business Processes segment consists of products and services in our portfolio of productivity, communication, and information services, spanning a variety of devices and platforms. This segment primarily comprises:

- Office Commercial (Office 365 subscriptions, the Office 365 portion of Microsoft 365 Commercial subscriptions, and Office licensed on-premises), comprising Office, Exchange, SharePoint, Microsoft Teams, Office 365 Security and Compliance, and Microsoft Viva.
- Office Consumer, including Microsoft 365 Consumer subscriptions, Office licensed on-premises, and other Office services.
- LinkedIn, including Talent Solutions, Marketing Solutions, Premium Subscriptions, and Sales Solutions.
- Dynamics business solutions, including Dynamics 365, comprising a set of intelligent, cloud-based applications across ERP, CRM, Customer Insights, Power Apps, and Power Automate; and on-premises ERP and CRM applications.

Intelligent Cloud

Our Intelligent Cloud segment consists of our public, private, and hybrid server products and cloud services that can power modern business and developers. This segment primarily comprises:

- Server products and cloud services, including Azure and other cloud services; SQL Server, Windows Server, Visual Studio, System Center, and related Client Access Licenses ("CALs"); and Nuance and GitHub.
- Enterprise Services, including Enterprise Support Services, Microsoft Consulting Services, and Nuance professional services.

More Personal Computing

Our More Personal Computing segment consists of products and services that put customers at the center of the experience with our technology. This segment primarily comprises:

- Windows, including Windows OEM licensing and other non-volume licensing of the Windows operating system; Windows Commercial, comprising volume licensing of the Windows operating system, Windows cloud services, and other Windows commercial offerings; patent licensing; and Windows Internet of Things.
- Devices, including Surface and PC accessories.
- Gaming, including Xbox hardware and Xbox content and services, comprising first- and third-party content (including games and in-game content), Xbox Game Pass and other subscriptions, Xbox Cloud Gaming, third-party disc royalties, advertising, and other cloud services.
- Search and news advertising.

Revenue and costs are generally directly attributed to our segments. However, due to the integrated structure of our business, certain revenue recognized and costs incurred by one segment may benefit other segments. Revenue from certain contracts is allocated among the segments based on the relative value of the underlying products and services, which can include allocation based on actual prices charged, prices when sold separately, or estimated costs plus a profit margin. Cost of revenue is allocated in certain cases based on a relative revenue methodology. Operating expenses that are allocated primarily include those relating to marketing of products and services from which multiple segments benefit and are generally allocated based on relative gross margin.

In addition, certain costs incurred at a corporate level that are identifiable and that benefit our segments are allocated to them. These allocated costs include legal, including settlements and fines, information technology, human resources, finance, excise taxes, field selling, shared facilities services, and customer service and support. Each allocation is measured differently based on the specific facts and circumstances of the costs being allocated.

Segment revenue and operating income were as follows during the periods presented:

(In millions)

Year Ended June 30,	2022	2021	2020
Revenue			
Productivity and Business Processes	\$ 63,364	\$ 53,915	\$ 46,398
Intelligent Cloud	75,251	60,080	48,366
More Personal Computing	59,655	54,093	48,251
Total	<u>\$ 198,270</u>	<u>\$ 168,088</u>	<u>\$ 143,015</u>
Operating Income			
Productivity and Business Processes	\$ 29,687	\$ 24,351	\$ 18,724
Intelligent Cloud	32,721	26,126	18,324
More Personal Computing	20,975	19,439	15,911
Total	<u>\$ 83,383</u>	<u>\$ 69,916</u>	<u>\$ 52,959</u>

No sales to an individual customer or country other than the United States accounted for more than 10% of revenue for fiscal years 2022, 2021, or 2020. Revenue, classified by the major geographic areas in which our customers were located, was as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
United States (a)	\$ 100,218	\$ 83,953	\$ 73,160
Other countries	98,052	84,135	69,855
Total	<u>\$ 198,270</u>	<u>\$ 168,088</u>	<u>\$ 143,015</u>

(a) Includes billings to OEMs and certain multinational organizations because of the nature of these businesses and the impracticability of determining the geographic source of the revenue.

Revenue, classified by significant product and service offerings, was as follows:

(In millions)

Year Ended June 30,	2022	2021	2020
Server products and cloud services	\$ 67,321	\$ 52,589	\$ 41,379
Office products and cloud services	44,862	39,872	35,316
Windows	24,761	22,488	21,510
Gaming	16,230	15,370	11,575
LinkedIn	13,816	10,289	8,077
Search and news advertising	11,591	9,267	8,524
Enterprise Services	7,407	6,943	6,409
Devices	6,991	6,791	6,457
Other	5,291	4,479	3,768
Total	\$ 198,270	\$ 168,088	\$ 143,015

We have recast certain previously reported amounts in the table above to conform to the way we internally manage and monitor our business.

Our Microsoft Cloud (formerly commercial cloud) revenue, which includes Azure and other cloud services, Office 365 Commercial, the commercial portion of LinkedIn, Dynamics 365, and other commercial cloud properties, was \$91.2 billion, \$69.1 billion and \$51.7 billion in fiscal years 2022, 2021, and 2020, respectively. These amounts are primarily included in Server products and cloud services, Office products and cloud services, and LinkedIn in the table above.

Assets are not allocated to segments for internal reporting presentations. A portion of amortization and depreciation is included with various other costs in an overhead allocation to each segment. It is impracticable for us to separately identify the amount of amortization and depreciation by segment that is included in the measure of segment profit or loss.

Long-lived assets, excluding financial instruments and tax assets, classified by the location of the controlling statutory company and with countries over 10% of the total shown separately, were as follows:

(In millions)

June 30,	2022	2021	2020
United States	\$ 106,430	\$ 76,153	\$ 60,789
Ireland	15,505	13,303	12,734
Other countries	44,433	38,858	29,770
Total	\$ 166,368	\$ 128,314	\$ 103,293

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Microsoft Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Microsoft Corporation and subsidiaries (the "Company") as of June 30, 2022 and 2021, the related consolidated statements of income, comprehensive income, cash flows, and stockholders' equity, for each of the three years in the period ended June 30, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of June 30, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2022, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of June 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated July 28, 2022, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

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

Revenue Recognition – Refer to Note 1 to the financial statements

Critical Audit Matter Description

The Company recognizes revenue upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company offers customers the ability to acquire multiple licenses of software products and services, including cloud-based services, in its customer agreements through its volume licensing programs.

Significant judgment is exercised by the Company in determining revenue recognition for these customer agreements, and includes the following:

- Determination of whether products and services are considered distinct performance obligations that should be accounted for separately versus together, such as software licenses and related services that are sold with cloud-based services.
- The pattern of delivery (i.e., timing of when revenue is recognized) for each distinct performance obligation.
- Identification and treatment of contract terms that may impact the timing and amount of revenue recognized (e.g., variable consideration, optional purchases, and free services).
- Determination of stand-alone selling prices for each distinct performance obligation and for products and services that are not sold separately.

Given these factors and due to the volume of transactions, the related audit effort in evaluating management's judgments in determining revenue recognition for these customer agreements was extensive and required a high degree of auditor judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our principal audit procedures related to the Company's revenue recognition for these customer agreements included the following:

- We tested the effectiveness of controls related to the identification of distinct performance obligations, the determination of the timing of revenue recognition, and the estimation of variable consideration.
- We evaluated management's significant accounting policies related to these customer agreements for reasonableness.
- We selected a sample of customer agreements and performed the following procedures:
 - Obtained and read contract source documents for each selection, including master agreements, and other documents that were part of the agreement.
 - Tested management's identification and treatment of contract terms.
 - Assessed the terms in the customer agreement and evaluated the appropriateness of management's application of their accounting policies, along with their use of estimates, in the determination of revenue recognition conclusions.
- We evaluated the reasonableness of management's estimate of stand-alone selling prices for products and services that are not sold separately.
- We tested the mathematical accuracy of management's calculations of revenue and the associated timing of revenue recognized in the financial statements.

Income Taxes – Uncertain Tax Positions – Refer to Note 12 to the financial statements

Critical Audit Matter Description

The Company's long-term income taxes liability includes uncertain tax positions related to transfer pricing issues that remain unresolved with the Internal Revenue Service ("IRS"). The Company remains under IRS audit, or subject to IRS audit, for tax years subsequent to 2003. While the Company has settled a portion of the IRS audits, resolution of the remaining matters could have a material impact on the Company's financial statements.

Conclusions on recognizing and measuring uncertain tax positions involve significant estimates and management judgment and include complex considerations of the Internal Revenue Code, related regulations, tax case laws, and prior-year audit settlements. Given the complexity and the subjective nature of the transfer pricing issues that remain unresolved with the IRS, evaluating management's estimates relating to their determination of uncertain tax positions required extensive audit effort and a high degree of auditor judgment, including involvement of our tax specialists.

How the Critical Audit Matter Was Addressed in the Audit

Our principal audit procedures to evaluate management's estimates of uncertain tax positions related to unresolved transfer pricing issues included the following:

- We evaluated the appropriateness and consistency of management's methods and assumptions used in the identification, recognition, measurement, and disclosure of uncertain tax positions, which included testing the effectiveness of the related internal controls.
- We read and evaluated management's documentation, including relevant accounting policies and information obtained by management from outside tax specialists, that detailed the basis of the uncertain tax positions.
- We tested the reasonableness of management's judgments regarding the future resolution of the uncertain tax positions, including an evaluation of the technical merits of the uncertain tax positions.
- For those uncertain tax positions that had not been effectively settled, we evaluated whether management had appropriately considered new information that could significantly change the recognition, measurement or disclosure of the uncertain tax positions.
- We evaluated the reasonableness of management's estimates by considering how tax law, including statutes, regulations and case law, impacted management's judgments.

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington
July 28, 2022

We have served as the Company's auditor since 1983.

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

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of our disclosure controls and procedures as required by Exchange Act Rule 13a-15(b) as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures are effective.

REPORT OF MANAGEMENT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our consolidated financial statements; providing reasonable assurance that receipts and expenditures of company assets are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use, or disposition of company assets that could have a material effect on our consolidated financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our consolidated financial statements would be prevented or detected.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, management concluded that the Company's internal control over financial reporting was effective as of June 30, 2022. There were no changes in our internal control over financial reporting during the quarter ended June 30, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Deloitte & Touche LLP has audited our internal control over financial reporting as of June 30, 2022; their report is included in Item 9A.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of Microsoft Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Microsoft Corporation and subsidiaries (the "Company") as of June 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of June 30, 2022, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended June 30, 2022, of the Company and our report dated July 28, 2022, expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington
July 28, 2022

ITEM 9B. OTHER INFORMATION

Not applicable.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

A list of our executive officers and biographical information appears in Part I, Item 1 of this Form 10-K. Information about our directors may be found under the caption "Our Director Nominees" in our Proxy Statement for the Annual Meeting of Shareholders to be held December 13, 2022 (the "Proxy Statement"). Information about our Audit Committee may be found under the caption "Board Committees" in the Proxy Statement. That information is incorporated herein by reference.

We have adopted the Microsoft Finance Code of Professional Conduct (the "finance code of ethics"), a code of ethics that applies to our Chief Executive Officer, Chief Financial Officer, Chief Accounting Officer, and other finance organization employees. The finance code of ethics is publicly available on our website at <https://aka.ms/FinanceCodeProfessionalConduct>. If we make any substantive amendments to the finance code of ethics or grant any waiver, including any implicit waiver, from a provision of the code to our Chief Executive Officer, Chief Financial Officer, or Chief Accounting Officer, we will disclose the nature of the amendment or waiver on that website or in a report on Form 8-K.

ITEM 11. EXECUTIVE COMPENSATION

The information in the Proxy Statement set forth under the captions "Director Compensation," "Named Executive Officer Compensation," "Compensation Committee Report," and, if required, "Compensation Committee Interlocks and Insider Participation," is incorporated herein by reference.

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

The information in the Proxy Statement set forth under the captions "Stock Ownership Information," "Principal Shareholders" and "Equity Compensation Plan Information" is incorporated herein by reference.

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

The information set forth in the Proxy Statement under the captions "Director Independence Guidelines" and "Certain Relationships and Related Transactions" is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information concerning fees and services provided by our principal accountant, Deloitte & Touche LLP (PCAOB ID No. 34), appears in the Proxy Statement under the headings "Fees Billed by Deloitte & Touche" and "Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditor" and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBIT AND FINANCIAL STATEMENT SCHEDULES

(a) Financial Statements and Schedules

The financial statements are set forth under Part II, Item 8 of this Form 10-K, as indexed below. Financial statement schedules have been omitted since they either are not required, not applicable, or the information is otherwise included.

Index to Financial Statements	Page
Income Statements	57
Comprehensive Income Statements	58
Balance Sheets	59
Cash Flows Statements	60
Stockholders' Equity Statements	61
Notes to Financial Statements	62
Report of Independent Registered Public Accounting Firm	96

(b) Exhibit Listing

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			Filing Date
			Form	Period Ending	Exhibit	
3.1	Amended and Restated Articles of Incorporation of Microsoft Corporation		8-K		3.1	12/1/16
3.2	Bylaws of Microsoft Corporation		8-K		3.2	6/14/17
4.1	Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee ("Base Indenture")		S-3ASR		4.1	10/29/15
4.2	Form of First Supplemental Indenture for 2.95% Notes due 2014, 4.20% Notes due 2019, and 5.20% Notes due 2039, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Base Indenture		8-K		4.2	5/15/09
4.5	Form of Second Supplemental Indenture for 0.875% Notes due 2013, 1.625% Notes due 2015, 3.00% Notes due 2020, and 4.50% Notes due 2040, dated as of September 27, 2010, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee		8-K		4.2	9/27/10

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
4.6	<u>Third Supplemental Indenture for 2.500% Notes due 2016, 4.000% Notes due 2021, and 5.300% Notes due 2041, dated as of February 8, 2011, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.2	2/8/11
4.7	<u>Fourth Supplemental Indenture for 0.875% Notes due 2017, 2.125% Notes due 2022, and 3.500% Notes due 2042, dated as of November 7, 2012, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.1	11/7/12
4.8	<u>Fifth Supplemental Indenture for 2.625% Notes due 2033, dated as of May 2, 2013, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.1	5/1/13
4.9	<u>Sixth Supplemental Indenture for 1.000% Notes due 2018, 2.375% Notes due 2023, and 3.750% Notes due 2043, dated as of May 2, 2013, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.2	5/1/13
4.10	<u>Seventh Supplemental Indenture for 2.125% Notes due 2021 and 3.125% Notes due 2028, dated as of December 6, 2013, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.1	12/6/13

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
4.11	<u>Eighth Supplemental Indenture for 1.625% Notes due 2018, 3.625% Notes due 2023, and 4.875% Notes due 2043, dated as of December 6, 2013, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee</u>		8-K		4.2	12/6/13
4.12	<u>Ninth Supplemental Indenture for 1.850% Notes due 2020, 2.375% Notes due 2022, 2.700% Notes due 2025, 3.500% Notes due 2035, 3.750% Notes due 2045, and 4.000% Notes due 2055, dated as of February 12, 2015, between Microsoft Corporation and U.S. Bank National Association, as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee</u>		8-K		4.1	2/12/15
4.13	<u>Tenth Supplemental Indenture for 1.300% Notes due 2018, 2.000% Notes due 2020, 2.650% Notes due 2022, 3.125% Notes due 2025, 4.200% Notes due 2035, 4.450% Notes due 2045, and 4.750% Notes due 2055, dated as of November 3, 2015, between Microsoft Corporation and U.S. Bank National Association, as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee</u>		8-K		4.1	11/3/15
4.14	<u>Eleventh Supplemental Indenture for 1.100% Notes due 2019, 1.550% Notes due 2021, 2.000% Notes due 2023, 2.400% Notes due 2026, 3.450% Notes due 2036, 3.700% Notes due 2046, and 3.950% Notes due 2056, dated as of August 8, 2016, between Microsoft Corporation and U.S. Bank, National Association, as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee</u>		8-K		4.1	8/5/16

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
4.15	Twelfth Supplemental Indenture for 1.850% Notes due 2020, 2.400% Notes due 2022, 2.875% Notes due 2024, 3.300% Notes due 2027, 4.100% Notes due 2037, 4.250% Notes due 2047, and 4.500% Notes due 2057, dated as of February 6, 2017, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee		8-K		4.1	2/3/17
4.16	Thirteenth Supplemental Indenture for 2.525% Notes due 2050 and 2.675% Notes due 2060, dated as of June 1, 2020, between Microsoft Corporation and U.S. Bank National Association, as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee		8-K		4.1	6/1/20
4.17	Fourteenth Supplemental Indenture for 2.921% Notes due 2052 and 3.041% Notes due 2062, dated as of March 17, 2021, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as Trustee, to the Indenture, dated as of May 18, 2009, between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee		8-K		4.1	3/17/21
4.18	Description of Securities		10-K	6/30/19	4.16	8/1/19
10.1*	Microsoft Corporation 2001 Stock Plan		10-Q	9/30/16	10.1	10/20/16
10.4*	Microsoft Corporation Employee Stock Purchase Plan		10-K	6/30/12	10.4	7/26/12
10.5*	Microsoft Corporation Deferred Compensation Plan		10-K	6/30/18	10.5	8/3/18
10.6*	Microsoft Corporation 2017 Stock Plan		DEF14A		Annex C	10/16/17
10.7*	Form of Stock Award Agreement Under the Microsoft Corporation 2017 Stock Plan		10-Q	3/31/2018	10.26	4/26/18
10.8*	Form of Performance Stock Award Agreement Under the Microsoft Corporation 2017 Stock Plan		10-Q	3/31/2018	10.27	4/26/18
10.9	Amended and Restated Officers' Indemnification Trust Agreement between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee		10-Q	9/30/16	10.12	10/20/16

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
10.10	Assumption of Beneficiaries' Representative Obligations Under Amended and Restated Officers' Indemnification Trust Agreement		10-K	6/30/2020	10.25	7/30/2020
10.11	Form of Indemnification Agreement and Amended and Restated Directors' Indemnification Trust Agreement between Microsoft Corporation and The Bank of New York Mellon Trust Company, N.A., as trustee		10-K	6/30/19	10.13	8/1/19
10.12	Assumption of Beneficiaries' Representative Obligations Under Amended and Restated Directors' Indemnification Trust Agreement		10-K	6/30/2020	10.26	7/30/2020
10.14*	Microsoft Corporation Deferred Compensation Plan for Non-Employee Directors		10-Q	12/31/17	10.14	1/31/18
10.15*	Microsoft Corporation Executive Incentive Plan		8-K		10.1	9/19/18
10.19*	Microsoft Corporation Executive Incentive Plan		10-Q	9/30/16	10.17	10/20/16
10.20*	Form of Executive Incentive Plan (Executive Officer SAs) Stock Award Agreement under the Microsoft Corporation 2001 Stock Plan		10-Q	9/30/16	10.18	10/20/16
10.21*	Form of Executive Incentive Plan Performance Stock Award Agreement under the Microsoft Corporation 2001 Stock Plan		10-Q	9/30/16	10.25	10/20/16
10.22*	Senior Executive Severance Benefit Plan		10-Q	9/30/16	10.22	10/20/16
10.23*	Offer Letter, dated February 3, 2014, between Microsoft Corporation and Satya Nadella		8-K		10.1	2/4/14
10.24*	Long-Term Performance Stock Award Agreement between Microsoft Corporation and Satya Nadella		10-Q	12/31/14	10.24	1/26/15
21	Subsidiaries of Registrant	X				
23.1	Consent of Independent Registered Public Accounting Firm	X				
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X				
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	X				
32.1**	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X				

Exhibit Number	Exhibit Description	Filed Herewith	Incorporated by Reference			
			Form	Period Ending	Exhibit	Filing Date
32.2**	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	X				
101.INS	Inline XBRL Instance Document—the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document	X				
101.SCH	Inline XBRL Taxonomy Extension Schema	X				
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase	X				
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase	X				
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase	X				
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase	X				
104	Cover page formatted as Inline XBRL and contained in Exhibit 101	X				
*	<i>Indicates a management contract or compensatory plan or arrangement.</i>					
**	<i>Furnished, not filed.</i>					

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned; thereunto duly authorized, in the City of Redmond, State of Washington, on July 28, 2022.

MICROSOFT CORPORATION

/s/ ALICE L. JOLLA

Alice L. Jolla

Corporate Vice President and Chief Accounting Officer (Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of Registrant and in the capacities indicated on July 28, 2022.

Signature	Title
/s/ SATYA NADELLA Satya Nadella	Chairman and Chief Executive Officer (Principal Executive Officer)
/s/ REID HOFFMAN Reid Hoffman	Director
/s/ HUGH F. JOHNSTON Hugh F. Johnston	Director
/s/ TERI L. LIST Teri L. List	Director
/s/ SANDRA E. PETERSON Sandra E. Peterson	Director
/s/ PENNY S. PRITZKER Penny S. Pritzker	Director
/s/ CARLOS A. RODRIGUEZ Carlos A. Rodriguez	Director
/s/ CHARLES W. SCHARF Charles W. Scharf	Director
/s/ JOHN W. STANTON John W. Stanton	Director
/s/ JOHN W. THOMPSON John W. Thompson	Lead Independent Director
/s/ EMMA N. WALMSLEY Emma N. Walmsley	Director
/s/ PADMASREE WARRIOR Padmasree Warrior	Director
/s/ AMY E. HOOD Amy E. Hood	Executive Vice President and Chief Financial Officer (Principal Financial Officer)
/s/ ALICE L. JOLLA Alice L. Jolla	Corporate Vice President and Chief Accounting Officer (Principal Accounting Officer)

SUBSIDIARIES OF REGISTRANT

The following is a list of subsidiaries of Microsoft Corporation as of June 30, 2022, omitting subsidiaries which, considered in the aggregate, would not constitute a significant subsidiary.

Name	Where Incorporated
Microsoft Ireland Research	Ireland
Microsoft Global Finance	Ireland
Microsoft Ireland Operations Limited	Ireland
Microsoft Online, Inc.	United States
LinkedIn Corporation	United States
LinkedIn Ireland Unlimited Company	Ireland
Nuance Communications, Inc.	United States

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-109185, 333-118764, 333-52852, 333-132100, 333-161516, 333-75243, 333-185757, and 333-221833 on Form S-8 and Registration Statement Nos. 333-240227 and 333-261590 on Form S-3 of our reports dated July 28, 2022, relating to the financial statements of Microsoft Corporation, and the effectiveness of Microsoft Corporation's internal control over financial reporting appearing in this Annual Report on Form 10-K of Microsoft Corporation for the year ended June 30, 2022.

/s/ DELOITTE & TOUCHE LLP

Seattle, Washington
July 28, 2022

CERTIFICATION

I, Satya Nadella, certify that:

1. I have reviewed this annual report on Form 10-K of Microsoft Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's Board of Directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ SATYA NADELLA

Satya Nadella
Chief Executive Officer

July 28, 2022

CERTIFICATION

I, Amy E. Hood, certify that:

1. I have reviewed this annual report on Form 10-K of Microsoft Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's Board of Directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ AMY E. HOOD

Amy E. Hood
Executive Vice President and
Chief Financial Officer

July 28, 2022

**CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)**

In connection with the Annual Report of Microsoft Corporation, a Washington corporation (the "Company"), on Form 10-K for the year ended June 30, 2022, as filed with the Securities and Exchange Commission (the "Report"), Satya Nadella, Chief Executive Officer of the Company, does hereby certify, pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350), that to his knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ SATYA NADELLA

Satya Nadella
Chief Executive Officer

July 28, 2022

[A signed original of this written statement required by Section 906 has been provided to Microsoft Corporation and will be retained by Microsoft Corporation and furnished to the Securities and Exchange Commission or its staff upon request.]

**CERTIFICATION PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002
(18 U.S.C. SECTION 1350)**

In connection with the Annual Report of Microsoft Corporation, a Washington corporation (the "Company"), on Form 10-K for the year ended June 30, 2022, as filed with the Securities and Exchange Commission (the "Report"), Amy E. Hood, Chief Financial Officer of the Company, does hereby certify, pursuant to § 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350), that to her knowledge:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ AMY E. HOOD

Amy E. Hood
Executive Vice President and
Chief Financial Officer

July 28, 2022

[A signed original of this written statement required by Section 906 has been provided to Microsoft Corporation and will be retained by Microsoft Corporation and furnished to the Securities and Exchange Commission or its staff upon request.]