

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
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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.