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

FORM 10-K

FOR ANNUAL AND TRANSITION REPORTS PURSUANT TO SECTIONS 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

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 0-24429

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**13-3728359**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification No.)**

300 Frank W. Burr Blvd.
Teaneck, New Jersey 07666
(Address of Principal Executive Offices including Zip Code)

Registrant's telephone number, including area code: (201) 801-0233

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A Common Stock, $0.01 par value per share	CTSH	The Nasdaq Stock Market LLC

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

The aggregate market value of the registrant's voting shares of common stock held by non-affiliates of the registrant on June 30, 2021, based on $69.26 per share, the last reported sale price on the Nasdaq Global Select Market of the Nasdaq Stock Market LLC on that date, was $36.4 billion.

The number of shares of Class A common stock, $0.01 par value, of the registrant outstanding as of February 11, 2022 was 524,534,828 shares.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents are incorporated by reference into the Annual Report on Form 10-K: Portions of the registrant's definitive Proxy Statement for its 2022 Annual Meeting of Stockholders are incorporated by reference into Part III of this Report.

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GLOSSARY

Defined Term	Definition
10b5-1 Plan	Trading plan adopted pursuant to Rule 10b5-1 of the Exchange Act
10th Magnitude	Pamlico 10th Magnitude Blocker LLC, now known as Cognizant 10th Magnitude Blocker, LLC
2009 Incentive Plan	Cognizant Technology Solutions Corporation Amended and Restated 2009 Incentive Compensation Plan
2017 Incentive Plan	Cognizant Technology Solutions Corporation 2017 Incentive Award Plan
Adjusted Diluted EPS	Adjusted diluted earnings per share
AI	Artificial Intelligence
APA	Advance Pricing Agreement
ASC	Accounting Standards Codification
ASR	Accelerated Stock Repurchase
ASU	Accounting Standards Update
Bright Wolf	Bright Wolf, LLC
CC	Constant Currency
Class Action Settlement Loss	Loss recorded in connection with the filing of a settlement agreement that resolved the consolidated putative securities class action against us and certain of our former officers
CMT	Communications, Media and Technology
Code	The Code on Social Security, 2020
Code Zero	Code Zero, LLC
Collaborative Solutions	Collaborative Solutions Holdings, LLC
COVID-19	The novel coronavirus disease
COVID-19 Charges	Costs directly related to the COVID-19 pandemic
CPI	Consumer Price Index
Credit Agreement	Credit agreement with a commercial bank syndicate, as amended
Credit Loss Standard	ASC Topic 326 "Financial Instruments - Credit Losses"
CTS India	Our principal operating subsidiary in India
D&I	Diversity and Inclusion
Devbridge	Devbridge Group LLC
DevOps	Agile relationship between development and IT operations
DOJ	United States Department of Justice
DSO	Days Sales Outstanding
EI-Technologies	Entrepreneurs et Investisseurs Technologies SAS
EPS	Earnings Per Share
ESG	Environmental, social and corporate governance
ESG Mobility	ESG Mobility GmbH
EU	European Union
EVP	Employee Value Proposition
Exchange Act	Securities Exchange Act of 1934, as amended
Executive Transition Costs	Costs associated with our CEO transition and the departure of our President in 2019
FASB	Financial Accounting Standards Board
FCPA	Foreign Corrupt Practices Act
FS	Financial Services
GAAP	Generally Accepted Accounting Principles in the United States of America
HC	Healthcare
High Court	Madras High Court
HR	Human Resources

Hunter	Certain net assets of Hunter Technical Resources, LLC
Inawisdom	Inawisdom Limited
India Defined Contribution Obligation	Certain statutory defined contribution obligations of employees and employers in India
India Tax Law	New tax regime enacted by the Government of India effective April 1, 2019
IP	Intellectual property
IoT	Internet of Things
IRS	Internal Revenue Service
IT	Information Technology
ITD	Indian Income Tax Department
Lev	Levementum, LLC
Linium	The ServiceNow business of Ness Digital Engineering
Magenic	Magenic Technologies, LLC
MAT	Minimum Alternative Tax
New Lease Standard	ASC Topic 842 "Leases"
New Signature	BSI Corporate Holdings, Inc.
OECD	Organization for Economic Co-operation and Development
PSU	Performance Stock Units
Purchase Plan	Cognizant Technology Solutions Corporation 2004 Employee Stock Purchase Plan, as amended
P&R	Products and Resources
ROU	Right of Use
RSU	Restricted Stock Units
SaaS	Software as a service
Samlink	Oy Samlink Ab
Samlink Impact	The reduction of revenue and accrual of expenses recorded in 2020 in connection with our settlement offer to exit from a large customer engagement of our Samlink subsidiary
SCI	Supreme Court of India
SEC	United States Securities and Exchange Commission
Second Circuit	United States Court of Appeals for the Second Circuit
Servian	SVN HoldCo Pty Limited
SEZ	Special Economic Zone
SG&A	Selling, general and administrative
Syntel	Syntel Sterling Best Shores Mauritius Ltd.
Tax on Accumulated Indian Earnings	The income tax expense related to the reversal of our indefinite reinvestment assertion on Indian earnings accumulated in prior years
Tax Reform Act	Tax Cuts and Jobs Act
Term Loan	Unsecured term loan under the Credit Agreement
Third Circuit	United States Court of Appeals for the Third Circuit
Tin Roof	Tin Roof Software, LLC
TQS	TQS Integration Limited
TriZetto	The TriZetto Group, Inc., now known as Cognizant Technology Software Group, Inc.
USDC-NJ	United States District Court for the District of New Jersey
USDC-SDNY	United States District Court for the Southern District of New York

PART I

Item 1. Business

Overview

Cognizant is one of the world's leading professional services companies, engineering modern business for the digital era. Our services include digital services and solutions, consulting, application development, systems integration, application testing, application maintenance, infrastructure services and business process services. Digital services have become an increasingly important part of our portfolio, aligning with our clients' focus on becoming data-enabled, customer-centric and differentiated businesses. We are continuing to invest in digital services with a focus on four key areas: IoT, digital engineering, data and cloud. We tailor our services and solutions to specific industries with an integrated global delivery model that employs client service and delivery teams based at client locations and dedicated global and regional delivery centers. We help clients modernize technology, reimagine processes and transform experiences so they can stay ahead in a fast-changing world.

Our purpose, vision and values comprise the Cognizant Agenda.

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In order to achieve this vision and support our clients, we are focusing our business on four strategic priorities to increase our commercial momentum and accelerate growth. These strategic priorities include:

- Accelerating digital - growing our digital business organically and inorganically;
- Globalizing Cognizant - accelerating the growth of our business in key international markets and diversifying our leadership, capabilities and delivery footprint;
- Repositioning our brand - improving global brand recognition and becoming better known as a global digital partner to the entire C-suite; and
- Increasing our relevance to our clients - leading with thought leadership and capabilities to address clients' business needs.

We seek to drive organic growth through investments in our digital capabilities across industries and geographies, including the extensive training and reskilling of our technical teams and the expansion of our local workforces in the United States and other markets around the world. Additionally, we pursue select strategic acquisitions that can expand our talent, experience and capabilities in key digital areas or in particular geographies or industries. In 2021, we completed seven such acquisitions. See Note 3 to our consolidated financial statements for additional information.

Business Segments

We go to market across our four industry-based business segments. Our clients seek to partner with service providers that have a deep understanding of their businesses, industry initiatives, customers, markets and cultures and the ability to create solutions tailored to meet their individual business needs. Across industries, our clients are confronted with the risk of being disrupted by nimble, digital-native competitors. They are therefore redirecting their focus and investment to digital operating models and embracing DevOps and key technologies that enable quick adjustments to shifts in their markets. We believe that our deep knowledge of the industries we serve and our clients' businesses has been central to our growth and high client satisfaction, and we continue to invest in those digital capabilities that help to enable our clients to become modern businesses.

Our business segments are as follows:

Financial Services (FS)	**Healthcare (HC)**	**Products and Resources (P&R)**	**Communications, Media and Technology (CMT)**
• Banking • Insurance	• Healthcare • Life Sciences	• Retail and Consumer Goods • Manufacturing, Logistics, Energy and Utilities • Travel and Hospitality	• Communications and Media • Technology

Our FS segment includes banking, capital markets and insurance companies. Demand in this segment is driven by our clients' need to serve their customers while being compliant with significant regulatory requirements and adaptable to regulatory change, as well as our clients' adoption and integration of digital technologies, including customer experience enhancement, robotic process automation, analytics and AI in areas such as digital lending, fraud detection and next generation payments. In addition to platforms that drive outcomes at speed, demand is also created by our clients' desire to reduce complexity through packaged solutions and suppliers with embedded product partners.

Our HC segment consists of healthcare providers and payers as well as life sciences companies, including pharmaceutical, biotech and medical device companies. Demand in this segment is driven by emerging industry trends, including the shift towards consumerism, outcome-based contracting, digital health and delivering integrated seamless, omni-channel, patient-centered experiences. These trends result in increased demand for services that drive operational improvements in areas such as clinical development, pharmacovigilance and manufacturing, as well as claims processing, enrollment, membership and billing. Demand is also created by the adoption and integration of digital technologies such as AI to shape personalized care plans and predictive data analytics to improve clinical trial designs, patient engagement and care outcomes.

Our P&R segment includes manufacturers, retailers and travel and hospitality companies, as well as companies providing logistics, energy and utility services. Demand in this segment is driven by our clients' focus on improving the efficiency of their operations, the enablement and integration of mobile platforms to support sales and other omni-channel commerce initiatives, and their adoption and integration of digital technologies, such as the application of intelligent systems to manage supply chains and enhance overall customer experiences, and IoT to instrument functions for factories, real estate, fleets and products to increase access to insight-generating data.

Our CMT segment includes information, media and entertainment, communications and technology companies. Demand in this segment is driven by our clients' need for services related to digital content, the creation of personalized user experiences, acceleration of digital engineering and access to new revenue streams to drive growth.

For the year ended December 31, 2021, the distribution of our revenues across our four industry-based business segments was as follows:

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The services we provide are distributed among a number of clients in each of our business segments. A loss of a significant client or a few significant clients in a particular segment could materially reduce revenues for that segment. The services we provide to our larger clients are often critical to their operations and a termination of our services would typically require an extended transition period with gradually declining revenues. Nevertheless, the volume of work performed for specific clients may vary significantly from year to year.

See Note 2 to our consolidated financial statements for additional information related to disaggregation of revenues by client location, service line and contract-type for each of our business segments.

Services and Solutions

Our services include digital services and solutions, consulting, application services, systems integration, infrastructure services and business process services. Additionally, we develop, license, implement and support proprietary and third-party software products and platforms. Central to our strategy to align with our clients' need to modernize is our continued investment in digital, with a focus on four key areas: IoT, digital engineering, data and cloud. These four capabilities enable clients to put data at the core of their operations, improve the experiences they offer to their customers, tap into new revenue streams, automate operations, defend against technology-enabled competitors and reduce costs. In many cases, our clients' new digital systems are built on the backbone of their existing legacy systems, which can increase complexity and impact business continuity. The COVID-19 pandemic accelerated our clients' need to modernize their businesses, which has led to increased demand for digital capabilities such as mobile workplace solutions, e-commerce, automation, AI and cybersecurity services and solutions. We believe our deep knowledge of our clients' infrastructure and systems provides us with a significant advantage as we work with them to build new digital capabilities to make their operations more efficient, effective and modern. We deliver all of our services and solutions across our four industry-based business segments to best address our clients' individual needs.

In 2021, our services and solutions were organized into two practice areas: Digital Business & Technology and Digital Business Operations. Our consulting professionals have deep industry-specific expertise and work closely with our practice areas to create modern frameworks, platforms and solutions that leverage a wide range of digital technologies across our clients' businesses to deliver higher levels of efficiency and new value for their customers.

Digital Business & Technology

Our Digital Business & Technology practice helps clients build modern enterprises that apply the power of cloud, data, software, and IoT to help them perform better and innovate faster. Our clients are able to embrace a new business and technology stack that comprises consumer-grade software, enterprise applications, modernized data and the instrumentation of everything in cloud-first architectures. Areas of focus within this practice are:

- interactive, which leverages our global network of studios that help clients craft new experiences;
- application modernization, which updates legacy applications using agile methodologies and cloud;
- AI and analytics, which drive business growth and efficiencies through a greater understanding of customers and operations;
- IoT, which unlocks greater productivity and new business models;
- experience-driven software engineering, which designs, engineers and delivers modern business software;
- application services;
- quality engineering and assurance; and
- cloud, infrastructure and security.

Digital Business Operations

Our Digital Business Operations practice helps clients build and run modern operating models that are adaptive, efficient, and human-centric. We achieve this through two main vehicles – intelligent process automation and outsourced business process services.

Our intelligent process automation advisory, implementation and managed services experts partner with clients to transform end to end processes, design and manage the next-generation human and digital workforce, enable seamless experiences for customers and employees, and achieve multi-fold productivity increases. Our outsourced business process services help clients transform and run functions and industry-specific processes such as finance and accounting, omni-channel customer care, loan origination, and pharmacovigilance. Outsourced services can help accelerate digital transformation and deliver business outcomes including revenue growth, increased customer satisfaction and cost savings. For digital native clients in areas such as FinTech, InsurTech and MedTech, our outsourced business process services deliver the operational support needed to rapidly scale, innovate and capitalize on opportunities. Areas of focus within this practice are:

- automation, analytics and consulting for business process outsourcing;
- platform-based operations; and
- core business process operations.

Global Delivery Model

We use a global delivery model, with delivery centers worldwide to provide our full range of services to our clients. Our delivery model includes employees deployed at client sites, local or in-country delivery centers, regional delivery centers and offshore delivery centers, as required to best serve our clients. As we scale our digital services and solutions, we are focused on hiring in the United States and other countries where we deliver services to our clients to expand our in-country delivery capabilities. Our extensive facilities, technology and communications infrastructure are designed to enable the effective collaboration of our global workforce across locations and geographies.

Competition

The markets for our services are highly competitive, characterized by a large number of participants and subject to rapid change. Competitors may include systems integration firms, contract programming companies, application software companies, cloud computing service providers, traditional consulting firms, professional services groups of computer equipment companies, infrastructure management companies, outsourcing companies and boutique digital companies. Our direct competitors include, among others, Accenture, Atos, Capgemini, Deloitte Digital, DXC Technology, EPAM Systems, Genpact, HCL Technologies, IBM Consulting, Infosys Technologies, Tata Consultancy Services and Wipro. In addition, we compete with numerous smaller local companies in the various geographic markets in which we operate.

The principal competitive factors affecting the markets for our services include the provider’s reputation and experience, strategic advisory capabilities, digital services capabilities, performance and reliability, responsiveness to customer needs, financial stability, corporate governance and competitive pricing of services. Accordingly, we rely on the following to compete effectively:

- investments to scale our digital services;
- our recruiting, training and retention model;
- our global delivery model;
- an entrepreneurial culture and approach to our work;
- a broad client referral base;
- investment in process improvement and knowledge capture;
- financial stability and good corporate governance;
- continued focus on responsiveness to client needs, quality of services and competitive prices; and
- project management capabilities and technical expertise.

Intellectual Property

We provide value to our clients based, in part, on our proprietary innovations, methodologies, software, reusable knowledge capital and other IP assets. We recognize the importance of IP and its ability to differentiate us from our competitors. We seek IP protection for many of our innovations and rely on a combination of patent, copyright and trade secret laws, confidentiality procedures and contractual provisions, to protect our IP. We have registered, and applied for the registration of, U.S. and international trademarks, service marks, and domain names to protect our brands, including our Cognizant brand, which is one of our most valuable assets. We own or are licensed under a number of patents, trademarks and copyrights of varying duration, relating to our products and services. We also have policies requiring our employees to respect the IP rights of others. While our proprietary IP rights are important to our success, we believe our business as a whole is not materially dependent on any particular IP right or any particular group of patents, trademarks, copyrights or licenses, other than our Cognizant brand.

Cognizant® and other trademarks appearing in this report are registered trademarks or trademarks of Cognizant and its affiliates in the United States and other countries, or third parties, as applicable.

Workforce

We had approximately 330,600 employees at the end of 2021, with 40,900 in North America, 15,700 in Continental Europe, 8,100 in the United Kingdom and 265,900 in various other locations throughout the rest of the world, including 240,000 in India. This represents an increase of 41,100 employees as compared to December 31, 2020. We utilize subcontractors to provide additional capacity and flexibility in meeting client demand, though the number of subcontractors has historically been immaterial relative to our employee headcount. We are not party to any significant collective bargaining agreements.

We balance the portion of our employees in the United States and other jurisdictions that rely on visas with consideration of the needs of our business to fulfill client demand and risks to our business from potential changes in immigration laws and regulations that may increase the costs associated with and ability to staff employees on visas to work in-country. Currently, less than 50% of our employees in the United States hold H-1B and L-1 visas.

Engaging Our People

As a global professional services company, Cognizant competes on the basis of the knowledge, experience, insights, skills and talent of its employees and the value they can provide to our clients. We aim for our employees to feel motivated, engaged, and empowered to do their best work through careers they find meaningful. In a market where competition for skilled IT professionals is intense, we focus on the following:

- **Engagement & Retention:** Cognizant aims to provide a compelling employee value proposition, or EVP, that inspires current and potential employees from all backgrounds and geographies. In 2021, we strengthened the articulation of our EVP and took targeted actions across the employee lifecycle to enhance the employee experience. We also trained top leaders, people managers, our HR team and other critical functions to deliver the EVP through their roles.

  We regularly assess employee sentiment through third-party engagement surveys, leader listening sessions and interactions on our internal channels. On an annual basis, after each engagement survey, we develop and communicate clear action plans to continue to build on our strengths and address shortfalls.

  We regularly monitor employee retention levels. Competition for skilled employees in the current labor market is intense, and we experienced significantly elevated attrition during 2021. We continue to enhance our pay-for-performance approach and increase our efforts with respect to recruitment, talent management and employee engagement. For the three months ended December 31, 2021 and 2020, our annualized attrition rate, including both voluntary and involuntary, was 34.6% and 19.0%, respectively. Our attrition rate for the years ended December 31, 2021 and 2020, including both voluntary and involuntary, was 30.8% and 20.6%, respectively. Our attrition is weighted towards our more junior employees. In 2021, voluntary attrition constituted the vast majority of our attrition for the period. In comparison, voluntary attrition in 2020 represented only approximately half of our attrition for the period as our personnel actions taken under our Fit for Growth Plan increased involuntary attrition while voluntary attrition was suppressed due to the COVID-19 pandemic.

- **Advancing Diversity & Inclusion:** We strive to continually improve upon D&I over the long term. A diverse and inclusive workforce strengthens our ability to innovate and to understand our clients' needs and aspirations.

  Highlights from our D&I efforts include:

  – Global D&I organization embedded within our HR function to drive accountability through our people processes and systems;

  – Global D&I training and programs, including allyship and inclusive mindset training for leaders;

  – Progressive hiring policies, including a diverse candidate pipeline initiative to ensure a more diverse interview slate at the Vice President level and above; and

  – Seven global affinity groups that welcome, nurture and provide safe spaces in which our employees can share their unique interests and aspirations.

  As of December 31, 2021, women accounted for 38% of our workforce as compared to 36% as of December 31, 2020.

  In our 2021 engagement survey, D&I continued to score higher than external benchmark, showing as a consistent strength for our company.

- **High Performance Culture:** We aim to create a work environment where every person is inspired to achieve, driven to perform and rewarded for their contributions. Our culture of meritocracy fosters individual and team high performance to fuel our growth.

  Highlights include:

  – Regular, performance-based promotions and merit increases as one lever to engage high-performing talent. During the 2021 cycle, we were proud to promote employees across all levels and provide merit increases to a significant number of our employees;

  - An internal job moves initiative, launched in 2021, focused on encouraging high performing employees to find their next job at Cognizant. This program is enhancing career velocity and bringing fresh thinking to our clients as employees take on new lateral and next-level opportunities across the Company; and
  - Continuously fostering a culture focused on recognition, Cognizant has created programs to reward all levels of employees through both monetary recognition as well as peer driven non-monetary recognition.

- **Learning & Development:** Clients count on us to know their industries, businesses, and technology environments, readily gain new digital skills and insights, and apply our knowledge to help them increase their competitiveness. We facilitate upward and cross-career growth through role and skill-based training and a robust learning ecosystem for employees at all levels.

  Highlights include:

  - Robust technical programs that reskill and upskill our employees with a focus on building digital skills in areas such as IoT, digital engineering, data and cloud;
  - The 2021 launch of the Cognizant Integrated Higher Education Program in India, a collaboration with premier institutions that empowers employees to earn a Masters of Technology degree while remaining employed with Cognizant. As part of the initiative, Cognizant sponsors an employee's final semester fee, as well as offers a loan to cover course fees for the first year;
  - Several innovative pre-employment training programs for graduates and early to mid-career professionals that focus on cultivating technology skills required for the next-generation workforce; and
  - Recognition of our talent development approach by leading learning and development organizations, such as the Association for Talent Development, the Brandon Hall Group and the Learning and Performance Institute.

- **Leadership Development & Talent Management:** Cognizant continuously fosters and builds its pipeline of diverse, high-performing leaders who have the breadth and versatility to drive our growth. To do this, we focus on engaging senior talent and enabling their success through continuous assessment and high impact development opportunities.

  Highlights include:

  - Targeted talent programs for key pools that include various training opportunities, digital leadership programs, custom leadership development initiatives and leadership transition programs to equip employees for taking on a leadership role;
  - Fast-tracking high-performing and high-potential leadership talent through personalized assessments, executive coaching and executive education programs;
  - Accelerating a diverse leadership pipeline through programs like Propel, an initiative focused on priming the next level of women leaders within Cognizant. In 2021, we reached a critical milestone, exceeding our pledge to put 1,000 women leaders globally through the program;
  - More than 600 leaders have participated in our LEAD@Cognizant partnership with Harvard University, which is a 4.5-month leadership capability program designed exclusively for Cognizant leaders to learn, practice and internalize how to set the course, connect the dots, inspire followership and deliver results through strategic alignment, collaboration and building high performing teams; and
  - Periodic talent processes such as talent reviews aim to help individuals develop in role and prepare for the future, while strengthening our leadership pipeline overall.

- **Supporting Wellbeing at Work and Home:** We offer benefits to care for the diverse needs of our employees and keep them feeling resilient, innovative and engaged. These include total compensation programs, health benefits, overall well-being and family care, tax savings programs, income protection and financial planning resources. As we continue to face evolving environmental and health challenges, we continually review and enhance our offerings to improve the competitiveness of our total compensation programs, including our health benefit offerings.

  Highlights include:

  - Our WorkFlex program, which provides employees greater flexibility to complete their required hours outside their standard schedule or to transition to a part-time schedule to accommodate personal priorities;
  - Various benefits to support employee mental health, including a robust Employee Assistance Program, peer support through trained employees who serve as mental health champions, and mental health insurance

coverage in most countries. In the United States, we also provide access to third party mental health platforms, including Ginger and eMindful; and

– The launch of Operation C3 in April 2021, as the second wave of the COVID-19 pandemic gripped India. This initiative facilitated vaccination for our Indian employees and their dependents, and set up vaccination drives across the country to help senior citizens, physically challenged dependents, and mothers with infants. Operation C3 also provided critical medical equipment to hospitals, helped to boost oxygen supplies and more.

Governmental Regulation and Environmental Matters

As a result of the size, breadth and geographic diversity of our business, our operations are subject to a variety of laws and regulations in the jurisdictions in which we operate, including with respect to import and export controls, temporary work authorizations or work permits and other immigration laws, content requirements, trade restrictions, tariffs, taxation, anti-corruption, the environment, government affairs, internal and disclosure control obligations, data privacy, intellectual property, employee and labor relations. For additional information, see Part I, Item 1A. Risk Factors.

Information About Our Executive Officers

The following table identifies our current executive officers:

Name	Age	Capacities in Which Served	In Current Position Since
Brian Humphries (1)	48	Chief Executive Officer	2019
Jan Siegmund (2)	57	Chief Financial Officer	2020
Robert Telesmanic (3)	55	Senior Vice President, Controller and Chief Accounting Officer	2017
John Kim(4)	54	Executive Vice President, General Counsel, Chief Corporate Affairs Officer and Secretary	2021
Rebecca Schmitt (5)	48	Executive Vice President, Chief People Officer	2020
Balu Ganesh Ayyar (6)	60	Executive Vice President and President, Digital Operations	2019
Gregory Hyttenrauch (7)	54	Executive Vice President and President, North America	2021
Ursula Morgenstern (8)	56	Executive Vice President and President, Global Growth Markets	2020
Rajesh Nambiar (9)	54	Executive Vice President and President, Digital Business and Technology	2021
Andrew Stafford (10)	57	Executive Vice President, Head of Global Delivery	2020

(1) Brian Humphries has been our Chief Executive Officer and a member of the Board of Directors since April 2019. Prior to joining Cognizant, he served as Chief Executive Officer of Vodafone Business, a division of Vodafone Group, from 2017 until 2019. Mr. Humphries joined Vodafone from Dell Technologies where he served as President and Chief Operating Officer of Dell's Infrastructure Solutions Group from 2016 to 2017, President of Dell's Global Enterprise Solutions from 2014 to 2016, and Vice President and General Manager, EMEA Enterprise Solutions from 2013 to 2014. Before joining Dell, Mr. Humphries was with Hewlett-Packard where his roles from 2008 to 2013 included Senior Vice President, Emerging Markets, Senior Vice President, Strategy and Corporate Development, and Chief Financial Officer of HP Services. The early part of his career was spent with Compaq and Digital Equipment Corporation. Mr. Humphries brings to the Board extensive leadership and global operations management experience from having served at public companies in the technology sector. He holds a bachelor's degree in Business Administration from the University of Ulster, Northern Ireland.

(2) Jan Siegmund has been our Chief Financial Officer since September 2020. Prior to joining Cognizant, Mr. Siegmund spent over 19 years with Automatic Data Processing (ADP), where he served as Corporate Vice President and Chief Financial Officer from 2012 to 2019 and Chief Strategy Officer and President of the Added Value Services Division from 1999 to 2012. He began his career at McKinsey & Company as a Senior Engagement Manager. Mr. Siegmund is a member of the Board of Directors of The Western Union Company, where he is Chair of the Audit Committee and a member of the Compliance Committee. He holds a master's degree in Industrial Engineering from Technical University Karlsruhe, Germany, a master's degree in Economics from the University of California, Santa Barbara and a doctorate in Economics from Technical University of Dresden, Germany.

(3) Robert Telesmanic has been our Senior Vice President, Controller and Chief Accounting Officer since January 2017, a Senior Vice President since 2010 and our Corporate Controller since 2004. Prior to that, he served as our Assistant Corporate Controller from 2003 to 2004. Prior to joining Cognizant, Mr. Telesmanic spent over 14 years with Deloitte &

Touche LLP. Mr. Telesmanic has a Bachelor of Science degree from New York University and an MBA degree from Columbia University.

(4) John Kim has been our Executive Vice President, General Counsel, Chief Corporate Affairs Officer and Secretary since March 2021. Previously, he served as our Senior Vice President and Deputy General Counsel, Global Commercial Contracts. Prior to joining Cognizant in 2019, Mr. Kim held a variety of senior leadership roles at Capgemini from January 2012 to November 2019, including Global Head of Big Deals. Prior to Capgemini, Mr. Kim served as U.S. Counsel for WNS Global Services from July 2009 to June 2011 and held a variety of leadership roles at Cendant Travel Distribution Services (now known as Travelport) from January 2001 to June 2006, including General Counsel and Chief Compliance Officer. He holds a bachelor's degree in English Literature from Columbia University and obtained his law degree from Cornell Law School.

(5) Rebecca (Becky) Schmitt has been our Executive Vice President, Chief People Officer since February 2020. Prior to joining Cognizant, Ms. Schmitt was the Chief People Officer of Sam's Club, a division of Walmart, Inc. from October 2018 through January 2020. Prior to that, she served as SVP, Chief People Officer, US eCommerce & Corporate Functions for Walmart from October 2016 through September 2018 and as VP, HR - Technology from February 2016 until October 2016. Prior to joining Walmart, Ms. Schmitt spent over 20 years with Accenture plc in various human resources roles, culminating in her role as HR Managing Director, North America Business from March 2014 through February 2016. Ms. Schmitt has a Bachelor of Arts degree from University of Michigan, Ann Arbor.

(6) Balu Ganesh Ayyar has been our Executive Vice President and President, Digital Operations since August 2019. Prior to joining Cognizant, Mr. Ayyar was the CEO of Mphasis, a global IT services company listed in India, from 2009 to 2017. Prior to Mphasis, Mr. Ayyar spent nearly two decades with Hewlett-Packard, holding a variety of leadership roles across multiple geographies.

(7) Gregory Hyttenrauch has been our Executive Vice President and President, North America since January 2021. Prior to that he served as our Executive Vice President and President, Cognizant Digital Systems & Technology from December 2019 to January 2021. Prior to joining Cognizant, Mr. Hyttenrauch served as Director, Global Cloud and Security Services for Vodafone from October 2015 to November 2019. Prior to Vodafone, Mr. Hyttenrauch held a variety of senior leadership positions at Capgemini from 2008 to 2015, including Deputy CEO, Global Infrastructure Services, and Global Sales Officer and CEO of the UK and Nordic Outsourcing Business Unit. Before joining Capgemini, Mr. Hyttenrauch held positions with CSC and EDS. He began his career with 13 years in the Canadian military, rising to the rank of captain. Mr. Hyttenrauch holds a bachelor's degree in Mechanical Engineering from the Royal Military College of Canada and an MBA in International Management from the University of Ottawa.

(8) Ursula Morgenstern has been our Executive Vice President and President, Global Growth Markets, which covers all of Cognizant's markets outside of North America, since December 2020. Prior to joining Cognizant, Ms. Morgenstern spent 16 years with Atos, a multinational IT services and consulting company in various management roles from 2004 to 2020, most recently as Head of Atos Central Europe from April 2020 to October 2020, CEO of Atos Germany from March 2018 to October 2020, and Global Head of Business and Platform Solutions from July 2015 to February 2018. Before Atos, Ms. Morgenstern was a partner with KPMG from 1998 to 2002. Her other previous roles include General Manager of K&V Information Systems from 1996 to 1998 and Project Manager for Kiefer & Veittinger from 1991 to 1996. She holds a bachelor's degree in Business Management from the University of Mannheim and an MBA from York University (Toronto).

(9) Rajesh Nambiar has been our Executive Vice President and President, Digital Business and Technology and Chairman of Cognizant India since June 2021. Previously, he served as our Executive Vice President and Chairman of Cognizant India. Prior to joining Cognizant in November 2020, Mr. Nambiar served as Chairman and President of Ciena India from May 2019 to October 2020. Mr. Nambiar was General Manager and Global Leader of Application Services at IBM from January 2017 to April 2019 and Managing Partner, Global Delivery and Services Integration Hub at IBM from January 2015 to December 2016. He held a variety of other senior leadership roles at IBM from November 2006 to December 2014. He began his career at Tata Consultancy Services where he worked for more than 17 years. Mr. Nambiar holds a master's degree in Statistics from the Indian Statistical Institute in Kolkata and is a graduate of Harvard Business School's Advanced Management Program.

(10) Andrew (Andy) Stafford has been our Head of Global Delivery since July 2020. Prior to joining Cognizant, he held a variety of executive positions, including Group Chief Operating Officer of Computacenter PLC from July 2017 to November 2018, and was Global Head of Services and Delivery for Unisys Inc. from April 2016 to May 2017. Mr. Stafford also spent nearly two decades with Accenture, first from 1988 to 1997 and then again from 2005 to 2013, in various leadership roles, the most recent being Senior Managing Director (Global Lead) from July 2012 to November 2013 and Managing Director of the Asia Pacific Region from 2009 to 2012. In between stints at Accenture, he was the Chief Operating Officer at Xchanging from September 2001 to November 2003, Chief Technology Officer at Virgin.com from September 2000 to March 2001, and he also spent time at Deloitte Consulting and Computacenter PLC. He holds a bachelor's degree in Electrical Engineering and Electronics from the University of Manchester Institute of Science and Technology in Manchester, England.

None of our executive officers is related to any other executive officer or to any of our Directors. Our executive officers are appointed annually by the Board of Directors and generally serve until their successors are duly appointed and qualified.

Corporate History

We began our IT development and maintenance services business in early 1994 as an in-house technology development center for The Dun & Bradstreet Corporation and its operating units. In 1996, we were spun-off from The Dun & Bradstreet Corporation and, in 1998, we completed an initial public offering to become a public company.

Available Information

We make available the following public filings with the SEC free of charge through our website at *www.cognizant.com* as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC:

- our Annual Reports on Form 10-K and any amendments thereto;
- our Quarterly Reports on Form 10-Q and any amendments thereto; and
- our Current Reports on Form 8-K and any amendments thereto.

No information on our website is incorporated by reference into this Form 10-K or any other public filing made by us with the SEC.

Item 1A. Risk Factors

We face various important risks and uncertainties, including those described below, that could adversely affect our business, results of operations and financial condition and, as a result, cause a decline in the trading price of our common stock.

Risks Related to our Business and Operations

Our results of operations could be adversely affected by economic and political conditions globally and in particular in the markets in which our clients and operations are concentrated.

Global macroeconomic conditions have a significant effect on our business as well as the businesses of our clients. Volatile, negative or uncertain economic conditions could cause our clients to reduce, postpone or cancel spending on projects with us and could make it more difficult for us to accurately forecast client demand and have available the right resources to profitably address such client demand. Clients may reduce demand for services quickly and with little warning, which may cause us to incur extra costs where we have employed more personnel than client demand supports.

Our business is particularly susceptible to economic and political conditions in the markets where our clients or operations are concentrated. Our revenues are highly dependent on clients located in the United States and Europe, and any adverse economic, political or legal uncertainties or adverse developments, including due to the uncertainty related to the COVID-19 pandemic, may cause clients in these geographies to reduce their spending and materially adversely impact our business. Many of our clients are in the financial services and healthcare industries, so any decrease in growth or significant consolidation in these industries or regulatory policies that restrict these industries may reduce demand for our services. Economic and political developments in India, where a significant majority of our operations and technical personnel are located, or in other countries where we maintain delivery operations, may also have a significant impact on our business and costs of operations. As a developing country, India has experienced and may continue to experience high inflation and wage growth, fluctuations in gross domestic product growth and volatility in currency exchange rates, any of which could materially adversely affect our cost of operations. Additionally, we benefit from governmental policies in countries that encourage foreign investment and promote the ease of doing business, such as tax incentives, and any change in policy or circumstances that results in the elimination of such benefits or degradation of the rule of law, or imposition of new adverse restrictions or costs on our operations could have a material adverse effect on our business, results of operations and financial condition.

The COVID-19 pandemic has had a significant and continuing adverse impact upon, and this or other pandemics may have a material adverse impact upon, our business, liquidity, results of operations and financial condition.

The ongoing global COVID-19 pandemic has caused and continues to cause significant loss of life and interruption to the global economy and has resulted in the curtailment of activities by businesses and consumers in much of the world as governments and others seek to limit the spread of the disease, including through business and transportation shutdowns and restrictions on people’s movement and congregation. Among other things, many of our and our clients’ offices have been closed and employees have been working from home and many consumer-facing businesses have closed or are operating at a significantly reduced level to observe various social distancing requirements and government-mandated measures. The overall result has included a dramatic reduction in activity in the global economy and significant adverse impacts to the financial markets, including the trading price of our common stock in the past and potentially in the future.

The COVID-19 pandemic has had a significant and continuing adverse impact upon, and this or other pandemics may have a material adverse impact upon, our business, liquidity, results of operations and financial condition, including as a result of the following:

- *Reduced client demand for services* – The vast majority of our business is with clients in the United States, the United Kingdom and other countries in Europe, all regions that have been hard hit by the pandemic. The COVID-19 pandemic at times reduced, and other future pandemics could reduce, demand for our services, particularly in regions that have been hit hard by the pandemic and from clients in the retail, consumer goods, travel and hospitality, and communications and media industries. Future client demand for services will depend on the course of the pandemic, including whether COVID-19 vaccines will be sufficiently effective against variant viruses of COVID-19, other factors such as measures taken by governments and businesses in affected areas that could negatively impact our clients and our business, and any economic disruption from new waves of pandemic infections.
- *Delivery challenges* – Due to the closures of many of our clients' facilities, including as a result of various orders from national, state or local governments, we have faced and may continue to face, in the near term or in future pandemics, challenges in delivering services to our clients and satisfying contractually agreed upon service levels. The pandemic, particularly in India, but also in the Philippines and other countries where we have near-shore or

offshore delivery operations for clients, as well as our in-country offices and offices of clients where our employees may normally work, has impacted and may continue to impact our ability to deliver services to clients. Our work-from-home arrangements for many of our employees may increase our exposure to security breaches or cyberattacks. A significant worsening of the pandemic, particularly in India, or a future security incident during the pandemic, could materially impair our ability to deliver services to clients to an extent that may have a material adverse impact to our business, liquidity, results of operations and financial condition.

- *Increased costs* – We could face increased costs in the future depending on developments relating to the pandemic, including as a result of the resurgence or persistence of the COVID-19 pandemic and the emergence of vaccine resistant strains of the virus.
- *Diversion of and strain on management and other corporate resources* – Addressing the significant personal and business challenges presented by the pandemic, including various business continuity measures and the need to enable work-from-home arrangements for many of our employees, has demanded significant management time and attention and strained other corporate resources, and is expected to continue to do so. Among other things, this may adversely impact our client and associate development and our ability to execute our strategy and various transformation initiatives.
- *Reduced employee morale and productivity* – The significant personal and business challenges presented by a pandemic, including the COVID-19 pandemic, such as the potentially life-threatening health risks to employees and their families and friends, the closures of schools and the unavailability of various services our employees may rely upon, such as childcare, have been and may be a cause of employee morale concerns and may adversely impact employee productivity. It is important for key groups of our employees to resume regular face-to-face collaboration, the absence of which can negatively impact client and employee engagement and development and our ability to execute our strategy, and these employees may be unable to do so due to ongoing concerns of infection.

The COVID-19 pandemic continues to evolve. The ultimate extent to which the pandemic impacts our business, liquidity, results of operations and financial condition will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the delivery, adoption and effectiveness of vaccines, future variants of the COVID-19 virus and any resulting impact on the effectiveness of vaccines, the availability of effective treatments for the disease, the duration and extent of the pandemic and waves of infection, travel restrictions and social distancing, the duration and extent of business closures and business disruptions and the effectiveness of actions taken to contain, treat and prevent the disease. If we or our clients experience prolonged shutdowns or other business disruptions, our business, liquidity, results of operations, financial condition and the trading price of our common stock may be materially adversely affected, and our ability to access the capital markets may be limited.

If we are unable to attract, train and retain skilled employees to satisfy client demand, including highly skilled technical personnel and personnel with experience in key digital areas, as well as senior management to lead our business globally, our business and results of operations may be materially adversely affected.

Our success is dependent, in large part, on our ability to keep our supply of skilled employees, including project managers, IT engineers and senior technical personnel, in particular those with experience in key digital areas, in balance with client demand around the world and on our ability to attract and retain senior management with the knowledge and skills to lead our business globally. In 2021, we experienced unprecedented attrition, which was considered industry-wide. As a result, we hired over a hundred thousand new employees and needed to reskill, retain, integrate and motivate our workforce of over 300,000 employees with diverse skills and expertise in order to serve client demands across the globe, respond quickly to rapid and ongoing technological, industry and macroeconomic developments and grow and manage our business. While we believe the level of attrition in 2021 was unusual, we believe it will remain elevated through 2022 and possibly beyond, which could materially adversely affect our business. We also must continue to maintain an effective senior leadership team that, among other things, is effective in executing on our strategic goals and growing our digital business. The loss of senior executives, or the failure to attract, integrate and retain new senior executives as the needs of our business require, could have a material adverse effect on our business and results of operations.

Competition for skilled labor is intense and, in some jurisdictions and service areas in which we operate and, in particular, in key digital areas, there are more open positions than qualified persons to fill these positions. Our business has experienced and may continue to experience significant employee attrition, which has caused us to incur increased costs to hire new employees with the desired skills. While we strive to adjust pricing to reduce the impact of compensation increases on our operating margin, we may not be successful in recovering these increases, which could adversely affect our profitability and operating margin. Costs associated with recruiting and training employees are significant. If we are unable to hire or deploy employees with the needed skillsets or if we are unable to adequately equip our employees with the skills needed, this could materially adversely affect our business. Additionally, if we are unable to maintain an employee environment that is competitive and appealing, it could have an adverse effect on engagement and retention, which may materially adversely affect our business.

We face challenges related to growing our business organically as well as inorganically through acquisitions, and we may not be able to achieve our targeted growth rates.

Achievement of our targeted growth rates requires continued significant organic growth of our business as well as inorganic growth through acquisitions. To achieve such growth, we must, among other things, continue to significantly expand our global operations, increase our product and service offerings, in particular with respect to digital, and scale our infrastructure to support such business growth. Continued business growth increases the complexity of our business and places significant strain on our management, employees, operations, systems, delivery, financial resources, and internal financial control and reporting functions, which we will have to continue to develop and improve to sustain such growth. Our ability to successfully manage change associated with the various business transformation initiatives is critical for the overall strategy execution. We must continually recruit and train new employees, retain and reskill, as necessary, existing sales, technical, finance, marketing and management employees with the knowledge, skills and experience that our business model requires and effectively manage our employees worldwide to support our culture, values, strategies and goals. Additionally, we expect to continue pursuing strategic and targeted acquisitions and investments to enhance our offerings of services and solutions or to enable us to expand our talent, experience and capabilities in key digital areas or in particular geographies or industries. We may not be successful in identifying suitable opportunities, completing targeted transactions or achieving the desired results, and such opportunities may divert our management's time and focus away from our core business. We may face challenges in effectively integrating acquired businesses into our ongoing operations and in assimilating and retaining employees of those businesses into our culture and organizational structure. If we are unable to manage our growth effectively, complete acquisitions of the number, magnitude and nature we have targeted, or successfully integrate any acquired businesses into our operations, we may not be able to achieve our targeted growth rates or improve our market share, profitability or competitive position generally or in specific markets or services.

We may not be able to achieve our profitability goals and maintain our capital return strategy.

Our goals for profitability and capital return rely upon a number of assumptions, including our ability to improve the efficiency of our operations and make successful investments to grow and further develop our business. Our profitability depends on the efficiency with which we run our operations and the cost of our operations, especially the compensation and benefits costs of our employees. We have incurred, and may continue to incur, substantial costs related to implementing our strategy to optimize such costs, and we may not realize the ultimate cost savings that we expect. We may not be able to efficiently utilize our employees if increased regulation, policy changes or administrative burdens of immigration, work visas or client worksite placement prevents us from deploying our employees on a timely basis, or at all, to fulfill the needs of our clients. Increases in wages and other costs, including as a result of attrition, may put pressure on our profitability. Fluctuations in foreign currency exchange rates can also have adverse effects on our revenues, income from operations and net income when items denominated in other currencies are translated or remeasured into U.S. dollars for presentation of our consolidated financial statements. We have entered into foreign exchange forward contracts intended to partially offset the impact of the movement of the exchange rates on future operating costs and to mitigate foreign currency risk on foreign currency denominated net monetary assets. However, the hedging strategies that we have implemented, or may in the future implement, to mitigate foreign currency exchange rate risks may not reduce or completely offset our exposure to foreign exchange rate fluctuations and may expose our business to unexpected market, operational and counterparty credit risks. We are particularly susceptible to wage and cost pressures in India and the exchange rate of the Indian rupee relative to the currencies of our client contracts due to the fact that the substantial majority of our employees are in India while our contracts with clients are typically in the local currency of the country where our clients are located. If we are unable to improve the efficiency of our operations, our operating margin may decline and our business, results of operations and financial condition may be materially adversely affected. Failure to achieve our profitability goals could adversely affect our business, financial condition and results of operations.

With respect to capital return, our ability and decisions to pay dividends and repurchase shares depend on a variety of factors, including the cash flow generated from operations, our cash and investment balances, our net income, our overall liquidity position, potential alternative uses of cash, such as acquisitions, and anticipated future economic conditions and financial results. Failure to carry out our capital return strategy may adversely impact our reputation with shareholders and shareholders' perception of our business and the trading price of our common stock.

Our failure to meet specified service levels or milestones required by certain of our client contracts may result in our client contracts being less profitable, potential liability for penalties or damages or reputational harm.

Many of our client contracts include clauses that tie our compensation to the achievement of agreed-upon performance standards or milestones. Failure to satisfy these requirements could significantly reduce our fees under the contracts, increase the cost to us of meeting performance standards or milestones, delay expected payments, subject us to potential damage claims under the contract terms or harm our reputation. The use of new technologies in our offerings can expose us to additional risks if those technologies fail to work as predicted, which could lead to cost overruns, project delays, financial penalties, or damage to our reputation. Clients also often have the right to terminate a contract and pursue damages claims for serious or repeated failure to meet these service commitments. Some of our contracts provide that a portion of our compensation depends on performance measures such as cost-savings, revenue enhancement, benefits produced, business goals attained and adherence to schedule. These goals can be complex and may depend on our clients' actual levels of business activity or may be based on assumptions that are later determined not to be achievable or accurate. As such, these provisions may increase the variability in revenues and margins earned on those contracts and have in the past resulted, and could in the future, result in significant losses on such contracts.

We face intense and evolving competition and significant technological advances that our service offerings must keep pace with in the rapidly changing markets we compete in.

The markets we serve and operate in are highly competitive, subject to rapid change and characterized by a large number of participants, as described in "Part I, Item 1. Business-Competition." In addition to large, global competitors, we face competition in many geographic markets from numerous smaller, local competitors that may have more experience with operations in these markets, have well-established relationships with our desired clients, or be able to provide services and solutions at lower costs or on terms more attractive to clients than we can. Consolidation activity may also result in new competitors with greater scale, a broader footprint or vertical integration that makes them more attractive to clients as a single provider of integrated products and services. In addition, concurrent use by many clients of multiple professional service providers means that we are required to be continually competitive on the quality, scope and pricing of our offerings or face a reduction or elimination of our business. If we are not able to successfully apply market level pricing and manage discounts, we may face downward pressure on gross margins and profitability.

Our success depends on our ability to continue to develop and implement services and solutions that anticipate and respond to rapid and continuing changes in technology to serve the evolving needs of our clients. Examples of areas of significant change include digital-, cloud- and security-related offerings, which are continually evolving, as well as developments in areas such as AI, augmented reality, automation, blockchain, IoT, quantum computing and as-a-service solutions. If we do not sufficiently invest in new technologies, successfully adapt to industry developments and changing demand, and evolve and expand our business at sufficient speed and scale to keep pace with the demands of the markets we serve, we may be unable to develop and maintain a competitive advantage and execute on our growth strategy, which would materially adversely affect our business, results of operations and financial condition.

Our relationships with our third party alliance partners, who supply us with necessary components to the services and solutions we offer our clients, are also critical to our ability to provide many of our services and solutions that address client demands. There can be no assurance that we will be able to maintain such relationships or that such components will be available on the expected timelines or for anticipated prices. Among other things, such alliance partners may in the future decide to compete with us, form exclusive or more favorable arrangements with our competitors or otherwise reduce our access to their products impairing our ability to provide the services and solutions demanded by clients.

We face legal, reputational and financial risks if we fail to protect client and/or Cognizant data from security breaches and/or cyberattacks.

In order to provide our services and solutions, we depend on global information technology networks and systems, to process, transmit, host and securely store electronic information (including our confidential information and the confidential information of our clients) and to communicate among our locations around the world and with our clients, suppliers and alliance partners (including numerous cloud service providers). Security breaches, employee malfeasance, or human or technological error create risks of shutdowns or disruptions of our operations and potential unauthorized access and/or disclosure of our or our clients' sensitive data, which in turn could jeopardize projects that are critical to our operations or the operations of our clients' businesses and have other adverse impacts on our business or the business of our clients.

Like other global companies, we and our clients, suppliers, alliance partners (including numerous cloud service providers) and other vendors we interact with face threats to data and systems, including by nation state threat actors, insider threats, perpetrators of random or targeted malicious cyberattacks, computer viruses, malware, worms, bot attacks or other destructive or disruptive software and attempts to misappropriate client information and cause system failures and disruptions. For example, in April 2020, we announced a security incident involving a Maze ransomware attack. The attack resulted in unauthorized access to certain data and caused significant disruption to our business.

A security compromise of our information systems, or of those of businesses with which we interact, that results in confidential information being accessed by unauthorized or improper persons, could harm our reputation and expose us to regulatory actions, client attrition due to reputational concerns or otherwise, containment and remediation expenses, and claims brought by our clients or others for breaching contractual confidentiality and security provisions or data protection laws. Monetary damages imposed on us could be significant and may impose costs in excess of insurance policy limits or not be covered by our insurance at all. Techniques used by bad actors to obtain unauthorized access, disable or degrade service, or sabotage systems continuously evolve and may not immediately produce signs of intrusion, and we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, a security breach could require that we expend substantial additional resources related to the security of our information systems, diverting resources from other projects and disrupting our businesses. Any remediation measures that we have taken or that we may undertake in the future in response to the security incident announced in April 2020 or other security threats may be insufficient to prevent future attacks.

We are required to comply with increasingly complex and changing data security and privacy regulations in the United States, the United Kingdom, the European Union and in other jurisdictions in which we operate that regulate the collection, use and transfer of personal data. These laws can include stringent compliance obligations regarding the handling of personal data as well as potential for significant financial penalties for noncompliance. The Court of Justice of the European Union decision in the Schrems II ruling in July 2020 on data transfer requirements has caused significant uncertainty for businesses transferring data outside of the European Union, which will likely result in continuing compliance and remediation costs.

In the United States, federal sectoral laws, such as the Health Insurance Portability and Accountability Act, and recently enacted state legislation, such as the California Consumer Privacy Act, and its successor the California Privacy Rights Act that will go into effect on January 1, 2023, impose or will impose extensive privacy requirements on organizations that handle personal data. Proposals for federal privacy legislation continue and other new state privacy sectoral laws such as Virginia and Colorado are on the horizon. Additionally, in India, the Personal Data Protection Bill, 2019 continues to make progress through the Indian Parliament. If enacted in its current form it would impose stringent obligations on the handling of personal data, including certain localization requirements for sensitive data. Penalties align with those in other regimes with proposed fines of up to 4% of annual turnover, as defined in the bill. Other countries have enacted or are considering enacting data localization laws that require certain data to stay within their borders. We may also face audits or investigations by one or more domestic or foreign government agencies or our clients pursuant to our contractual obligations relating to our compliance with these regulations. Complying with changing regulatory requirements requires us to incur substantial costs, exposes us to potential regulatory action or litigation, and may require changes to our business practices in certain jurisdictions, any of which could materially adversely affect our business operations and operating results.

If our risk management, business continuity and disaster recovery plans are not effective and our global delivery capabilities are impacted, our business and results of operations may be materially adversely affected and we may suffer harm to our reputation.

Our business model is dependent on our global delivery capabilities, which include coordination between our delivery centers in India, our other global and regional delivery centers, the offices of our clients and our associates worldwide. System failures, outages and operational disruptions may be caused by factors outside of our control, such as hostilities, political unrest, terrorist attacks, natural disasters (including events that may be caused or exacerbated by climate change), and public health emergencies and pandemics, such as the COVID-19 pandemic, affecting the geographies where our people, equipment and clients are located. For example, we have substantial global delivery operations in Chennai, India, a city that has experienced severe rains and flooding as a result of climate change. Our risk management, business continuity and disaster recovery plans may not be effective at predicting or mitigating the effects of such disruptions, particularly in the case of catastrophic events or longer term, increasingly severe developments that occur as a result of climate change. Any such disruption may result in lost revenues, a loss of clients and reputational damage, which would have an adverse effect on our business, results of operations and financial condition.

A substantial portion of our employees in the United States, United Kingdom, European Union and other jurisdictions rely on visas to work in those areas such that any restrictions on such visas or immigration more generally or increased costs of obtaining such visas or increases in the wages we are required to pay employees on visas may affect our ability to compete for and provide services to clients in these jurisdictions, which could materially adversely affect our business, results of operations and financial condition.

A substantial portion of our employees in the United States and in many other jurisdictions, including countries in Europe, rely upon temporary work authorization or work permits, which makes our business particularly vulnerable to changes and variations in immigration laws and regulations, including written changes and policy changes to the manner in which the laws and regulations are interpreted or enforced, and potential enforcement actions and penalties that might cause us to lose access to such visas. The political environment in the United States, the United Kingdom and other countries in recent years has included significant support for anti-immigrant legislation and administrative changes. Many of these recent changes have resulted in, and various proposed changes may result in, increased difficulty in obtaining timely visas that could impact our ability to staff projects, including as a result of visa application rejections and delays in processing applications, and significantly increased costs for us in obtaining visas or as a result of prevailing wage requirements for our employees on visas. For example, in the United States, the prior presidential administration adopted a number of policy changes and executive orders designed to limit immigration and the ability of immigrants to be employed, including increased scrutiny of the issuance of new and the renewal of existing H-1B visa applications and the placement of H-1B visa workers on third party worksites, increases to the prevailing wage requirements that set a minimum level of compensation for visa holders and, for entities where 15% or more of the workers in the United States hold H-1B and L-1 visas, increases in the visa costs for such entities. While a number of these policy changes and executive orders failed to be enforced or enacted into law, the current administration has continued to explore visa and immigration reform. There continues to be political support for potential new laws and regulations relating to visas or immigration and the implementation of these or similar measures in the future may have a material adverse impact on companies like ours that have a substantial percentage of our employees on visas. Our principal operating subsidiary in the United States utilizes a high number of skilled workers holding H-1B and L-1 visas and, as a result, may be subject to increased costs if any such laws, regulations, policy changes or executive orders go into effect. In the EU, many countries continue to implement new regulations to move into compliance with the EU Directive of 2014 to harmonize immigration rules for intracompany transferees in most EU member states and to facilitate the transfer of managers, specialists and graduate trainees both into and within the region. The changes have had significant impact on mobility programs and have led to new notification and documentation requirements for companies sending employees to EU countries. Recent changes or any additional adverse revisions to immigration laws and regulations in the jurisdictions in which we operate may cause us delays, staffing shortages, additional costs or an inability to bid for or fulfill projects for clients, any of which could have a material adverse effect on our business, results of operations and financial condition.

Legal, Regulatory and Legislative Risks

Anti-outsourcing legislation, if adopted, and negative perceptions associated with offshore outsourcing could impair our ability to serve our clients and materially adversely affect our business, results of operations and financial condition.

The practice of outsourcing services to organizations operating in other countries is a topic of political discussion in the United States, which is our largest market, as well as other regions in which we have clients. For example, measures aimed at limiting or restricting outsourcing by U.S. companies have been put forward for consideration by the U.S. Congress and in state legislatures to address concerns over the perceived association between offshore outsourcing and the loss of jobs domestically. If any such measure is enacted, our ability to provide services to our clients could be impaired.

In addition, from time to time there has been publicity about purported negative experiences associated with offshore outsourcing, such as alleged domestic job loss and theft and misappropriation of sensitive client data, particularly involving service providers in India. Current or prospective clients may elect to perform certain services themselves or may be discouraged from utilizing global service delivery providers like us due to negative perceptions that may be associated with using global service delivery models or firms. Any slowdown or reversal of existing industry trends toward global service delivery would seriously harm our ability to compete effectively with competitors that provide the majority of their services from within the country in which our clients operate.

We are subject to numerous and evolving legal and regulatory requirements and client expectations in the many jurisdictions in which we operate, and violations of, unfavorable changes in or an inability to meet such requirements or expectations could harm our business.

We provide services to clients and have operations in many parts of the world and in a wide variety of different industries, subjecting us to numerous, and sometimes conflicting, laws and regulations on matters as diverse as trade controls and sanctions, immigration (including temporary work authorizations or work permits), content requirements, trade restrictions, tariffs, taxation, antitrust laws, anti-corruption laws (including the FCPA and the U.K. Bribery Act), the environment, government affairs, internal and disclosure control obligations, data privacy, intellectual property, employment and labor relations. We face significant regulatory compliance costs and risks as a result of the size and breadth of our business. For example, we may experience increased costs in 2022 and future years for employment and post-employment benefits in India as a result of the issuance of the Code in late 2020. In addition, we may face costs and risks associated with uncertainty as to the ongoing regulatory impact of the United Kingdom's exit from the European Union.

We are also subject to a wide range of potential enforcement actions, audits or investigations regarding our compliance with these laws or regulations in the conduct of our business, and any finding of a violation could subject us to a wide range of civil or criminal penalties, including fines, debarment, or suspension or disqualification from government contracting, prohibitions or restrictions on doing business, loss of clients and business, legal claims by clients and damage to our reputation.

We commit significant financial and managerial resources to comply with our internal control over financial reporting requirements, but we have in the past identified and may in the future identify material weaknesses or deficiencies in our internal control over financial reporting that cause us to incur incremental remediation costs in order to maintain adequate controls. For example, in recent years we had to spend significant resources on conducting an internal investigation and cooperating with investigations by the DOJ and the SEC, both concluded in 2019, focused on whether certain payments relating to Company-owned facilities in India were made in violation of the FCPA and other applicable laws.

Governmental bodies, investors, clients and businesses are increasingly focused on ESG issues, which has resulted and may in the future continue to result in the adoption of new laws and regulations, reporting requirements and changing buying practices. If we fail to comply with new laws, regulations or reporting requirements or keep pace with ESG trends and developments or fail to meet the expectations of our clients and investors, our reputation and business could be adversely impacted.

Changes in tax laws or in their interpretation or enforcement, failure by us to adapt our corporate structure and intercompany arrangements to enhance our global tax profile or adverse outcomes of tax audits, investigations or proceedings could have a material adverse effect on our effective tax rate, results of operations and financial condition.

The interpretation of tax laws and regulations in the many jurisdictions in which we operate and the related tax accounting principles are complex and require considerable judgment to determine our income taxes and other tax liabilities worldwide. Tax laws and regulations affecting us and our clients, including applicable tax rates, and the interpretation and enforcement of such laws and regulations are subject to change as a result of economic, political and other factors, and any such changes or changes in tax accounting principles could increase our effective worldwide income tax rate and have a material adverse effect on our net income and financial condition. We routinely review and update our corporate structure and intercompany arrangements, including transfer pricing policies, consistent with applicable laws and regulations, to align with our evolving business operations and enhance our global tax profile across the numerous jurisdictions, such as the United States, India and the United Kingdom, in which we operate. Failure to successfully adapt our corporate structure and intercompany arrangements to align with our evolving business operations and enhance our global tax profile may increase our worldwide effective tax rate and have a material adverse effect on our earnings and financial condition.

The following are several examples of changes in tax laws that may impact us:

- The Tax Reform Act was enacted in December 2017 and made a number of significant changes to the corporate tax regime in the United States. We anticipate that the U.S. Treasury department will continue to issue interpretive guidance which may modify relevant aspects of the tax regime. The U.S. federal government is also considering further tax reform that could increase corporate tax rates.
- The OECD has been working on a Base Erosion and Profit Shifting project and is expected to continue to issue guidelines and proposals that may change numerous long-standing tax principles. The changes recommended by the OECD have been or are being adopted by many of the countries in which we do business and could lead to disagreements among jurisdictions over the proper allocation of profits among them. The OECD has also undertaken a new project focused on "Addressing the Tax Challenges of the Digitalization of the Economy." This project has proposed implementing a global model for minimum taxation, which may impact multinational businesses. Similarly, the European Commission and various jurisdictions have introduced proposals to or passed laws that impose a separate tax on specified digital services. These recent and potential future tax law changes create uncertainty and may materially adversely impact our provision for income taxes.

Our worldwide effective income tax rate may increase as a result of these recent developments, changes in interpretations and assumptions made, additional guidance that may be issued and ongoing and future actions the Company has or may take with respect to our corporate structure and intercompany arrangements.

Additionally, we are subject from time to time to tax audits, investigations and proceedings. Tax authorities have disagreed, and may in the future disagree, with our judgments, and are taking increasingly aggressive positions, including with respect to our intercompany transactions. For example, we are currently involved in an ongoing dispute with the ITD in which the ITD asserts that we owe additional taxes for two transactions by which CTS India repurchased shares from its shareholders, as more fully described in Note 11 to the consolidated financial statements. Adverse outcomes in any such audits, investigations or proceedings could increase our tax exposure and cause us to incur increased expense, which could materially adversely affect our results of operations and financial condition.

Our business subjects us to considerable potential exposure to litigation and legal claims and could be materially adversely affected if we incur legal liability.

We are subject to, and may become a party to, a variety of litigation or other claims and suits that arise from time to time in the conduct of our business. Our business is subject to the risk of litigation involving current and former employees, clients, alliance partners, subcontractors, suppliers, competitors, shareholders, government agencies or others through private actions, class actions, whistleblower claims, administrative proceedings, regulatory actions or other litigation. While we maintain insurance for certain potential liabilities, such insurance does not cover all types and amounts of potential liabilities and is subject to various exclusions as well as caps on amounts recoverable.

Our client engagements expose us to significant potential legal liability and litigation expense if we fail to meet our contractual obligations or otherwise breach obligations to third parties or if our subcontractors breach or dispute the terms of our agreements with them and impede our ability to meet our obligations to our clients. For example, third parties could claim that we or our clients, whom we typically contractually agree to indemnify with respect to the services and solutions we provide, infringe upon their IP rights. Any such claims of IP infringement could harm our reputation, cause us to incur substantial costs in defending ourselves, expose us to considerable legal liability or prevent us from offering some services or solutions in the future. We may have to engage in legal action to protect our own IP rights, and enforcing our rights may require considerable time, money and oversight, and existing laws in the various countries in which we provide services or solutions may offer only limited protection.

We also face considerable potential legal liability from a variety of other sources. Our acquisition activities have in the past and may in the future be subject to litigation or other claims, including claims from employees, clients, stockholders, or other third parties. We have also been the subject of a number of putative securities class action complaints and putative shareholder derivative complaints relating to the matters that were the subject of our now concluded internal investigation into potential violations of the FCPA and other applicable laws, and may be subject to such legal actions for these or other matters in the future. See "Part I, Item 3. Legal Proceedings" for more information. We establish reserves for these and other matters when a loss is considered probable and the amount can be reasonably estimated; however, the estimation of legal reserves and possible losses involves significant judgment and may not reflect the full range of uncertainties and unpredictable outcomes inherent in litigation, and the actual losses arising from particular matters may exceed our estimates and materially adversely affect our results of operations.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We have sales and marketing offices, innovation labs, and digital design and consulting centers in major business markets, including New York, London, Paris, Melbourne, and Singapore, among others, which are used to support our clients across all four of our business segments. In total, we have offices and operations in approximately 100 cities and 35 countries around the world, with our worldwide headquarters located in a leased facility in Teaneck, New Jersey in the United States.

We utilize a global delivery model with delivery centers worldwide, including in-country, regional and global delivery centers. We have over 29 million square feet of owned and leased facilities for our delivery centers. Our largest delivery center presence is in India, representing 88% of our total delivery centers on a square-foot basis, with the largest presence in Chennai (10 million square feet), Hyderabad (4 million square feet), Pune (3 million square feet), Kolkata (3 million square feet) and Bangalore (2 million square feet). We also have a significant number of delivery centers in other countries, including the United States, Philippines, Canada, Mexico and countries throughout Europe.

We believe our current facilities are adequate to support our operations in the immediate future, and that we will be able to obtain suitable additional facilities on commercially reasonable terms as needed.

Item 3. Legal Proceedings

See Note 15 to our consolidated financial statements.

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

Our Class A common stock trades on the Nasdaq Stock Market under the symbol "CTSH". As of December 31, 2021, the approximate number of holders of record of our Class A common stock was 111 and the approximate number of beneficial holders of our Class A common stock was 451,800.

Cash Dividends

During 2021, we paid quarterly cash dividends of $0.24 per share, or $0.96 per share in total for the year. In January 2022, our Board of Directors approved a cash dividend of $0.27 per share with a record date of February 18, 2022 and a payment date of March 1, 2022. We intend to continue to pay quarterly cash dividends in accordance with our capital allocation framework. However, future dividend payments depend on a variety of factors, including our cash flow generated from operations, cash and investment balances, net income, overall liquidity position, potential alternative uses of cash, such as acquisitions, and anticipated future economic conditions and financial results.

Issuer Purchases of Equity Securities

Our stock repurchase program, allows for the repurchase of up to $9.5 billion, excluding fees and expenses, of our Class A common stock through open market purchases, including under a 10b5-1 Plan or in private transactions, including through ASR agreements entered into with financial institutions, in accordance with applicable federal securities laws. The repurchase program does not have an expiration date. The timing of repurchases and the exact number of shares to be purchased are determined by management, in its discretion, or pursuant to 10b5-1 Plan, and will depend upon market conditions and other factors.

During the three months ended December 31, 2021, we repurchased $66 million of our Class A common stock under our stock repurchase program. The following table sets out the stock repurchase activity under our stock repurchase program during the fourth quarter of 2021 and the approximate dollar value of shares that may yet be purchased under the program as of December 31, 2021.

Month	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)
October 1, 2021 - October 31, 2021	—	$ —	—	$ 2,185
November 1, 2021 - November 30, 2021	179,882	79.56	179,882	2,171
December 1, 2021 - December 31, 2021	619,075	82.91	619,075	2,119
Total	798,957	$ 82.16	798,957	

We regularly purchase shares in connection with our stock-based compensation plans as shares of our Class A common stock are tendered by employees for payment of applicable statutory tax withholdings. For the three months ended December 31, 2021, we purchased 0.3 shares at an aggregate cost of $20 million in connection with employee tax withholding obligations.

Performance Graph

The following graph compares the cumulative total stockholder return on our Class A common stock with the cumulative total return on the S&P 500 Index and the S&P 500 Information Technology Index for the period beginning December 31, 2016 and ending on the last day of our last completed fiscal year. The stock performance shown on the graph below is not indicative of future price performance.

COMPARISON OF CUMULATIVE TOTAL RETURN(1)(2)

Among Cognizant, the S&P 500 Index and the S&P 500 Information Technology Index

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Company / Index	Base Period 12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21
Cognizant Technology Solutions Corp	$ 100	$ 127.57	$ 115.25	$ 114.01	$ 152.69	$ 167.41
S&P 500 Index	100	121.83	116.49	153.17	181.35	233.41
S&P 500 Information Technology Index	100	138.83	138.43	208.05	299.37	402.73

(1) Graph assumes $100 invested on December 31, 2016 in our Class A common stock, the S&P 500 Index and the S&P 500 Information Technology Index.
(2) Cumulative total return assumes reinvestment of dividends.

Item 6. [Reserved]

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Executive Summary

Cognizant is one of the world's leading professional services companies, engineering modern business for the digital era. Our services include digital services and solutions, consulting, application development, systems integration, application testing, application maintenance, infrastructure services and business process services. Digital services have become an increasingly important part of our portfolio, aligning with our clients' focus on becoming data-enabled, customer-centric and differentiated businesses. We are continuing to invest in digital services with a focus on four key areas: IoT, digital engineering, data and cloud. We tailor our services and solutions to specific industries with an integrated global delivery model that employs client service and delivery teams based at client locations and dedicated global and regional delivery centers. We help clients modernize technology, reimagine processes and transform experiences so they can stay ahead in a fast-changing world.

2021 Financial Results

Revenue	Income from Operations	Operating Margin	Diluted EPS
	GAAP Adjusted	GAAP Adjusted	GAAP Adjusted
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GAAP	GAAP	Adjusted[1]	GAAP	Adjusted[1]	GAAP	Adjusted[1]
Revenue up $1,855 million or 11.1% from 2020; 10.0% in constant currency[1]	Income from Operations up $712 million or 33.7% from 2020	Income from Operations up $452 million or 18.9% from 2020	Operating margin up 260 bps from 2020	Operating margin up 100 bps from 2020	Diluted EPS up $1.48 or 57.6% from 2020	Diluted EPS up $0.70 or 20.5% from 2020

During the year ended December 31, 2021, revenues increased by $1,855 million as compared to the year ended December 31, 2020, representing growth of 11.1%, or 10.0% on a constant currency basis[1]. Our recently completed acquisitions contributed 320 basis points to our revenue growth. Revenue growth also reflected our clients' continued adoption and integration of digital technologies and was aided by the negative impact on 2020 revenues of the COVID-19 pandemic. Revenue growth in the Healthcare segment was driven by increased demand for our services from our pharmaceutical clients while continued adoption and integration of digital technologies across our manufacturing, logistics, energy and utilities clients drove revenue growth in the Products and Resources segment. Revenues in the Communications, Media and Technology segment benefited from our technology clients' growing demand for services related to digital content. Our 2020 revenue was negatively affected by the Samlink Impact, which contributed approximately 70 basis points to our 2021 revenue growth. We continue to experience pricing pressure on our non-digital services as our clients, particularly those in the Financial Services segment, optimize the cost of supporting their legacy systems and operations.

Our operating margin and Adjusted Operating Margin[1] increased to 15.3% and 15.4%, respectively, for the year ended December 31, 2021 from 12.7% and 14.4%, respectively, for the year ended December 31, 2020. Our 2021 GAAP and Adjusted Operating Margins benefited from savings generated by the implementation of the delivery cost optimization initiatives of our 2020 Fit for Growth Plan and a decrease in travel and entertainment costs. These benefits were partially offset by investments intended to drive and support organic revenue growth, including additions to our sales organization and initiatives to reposition our brand, as well as the negative impact on margin of our recently completed acquisitions, increased subcontractor and compensation costs as a result of significantly elevated attrition and costs related to the modernization of our

[1] Adjusted Income From Operations, Adjusted Operating Margin, Adjusted Diluted EPS and constant currency revenue growth are not measurements of financial performance prepared in accordance with GAAP. See "Non-GAAP Financial Measures" for more information and reconciliations to the most directly comparable GAAP financial measures.

core IT systems. Our 2020 operating margins were adversely impacted by the decline in revenues brought on by the COVID-19 pandemic, the Samlink Impact and the April 2020 ransomware attack. Our 2020 GAAP operating margin was also negatively impacted by costs related to our restructuring program that concluded at the end of 2020 and COVID-19 Charges.

During the fourth quarter of 2021, we reached a settlement agreement with the final customer involved in our previously disclosed proposed exit from a large customer engagement of our Samlink subsidiary and additionally entered into an agreement to sell this subsidiary. We reached settlement agreements with the other two customers to this engagement in the second quarter of 2021. The financial terms of the final settlement agreements with the three customers did not materially differ from our original 2020 offer and, accordingly, the impact to our 2021 consolidated statement of operations was immaterial. In 2020, in connection with our settlement offer, we recorded a reduction of revenues of $118 million and additional expenses of $33 million, or, jointly, the Samlink Impact. This negatively impacted both our 2020 GAAP and Adjusted Diluted EPS[2] by $0.27. The sale of our Samlink subsidiary closed on February 1, 2022. In 2021, our Samlink subsidiary had $113 million in revenues.

In the third quarter of 2021, the parties to the consolidated putative securities class action suit filed a settlement agreement that resolved the consolidated putative securities class action against us and certain of our former officers. As a result, we recorded a $20 million Class Action Settlement Loss in "Selling, general and administrative expenses" in our consolidated financial statements. The loss is excluded from Adjusted Operating Margin[2] and Adjusted Diluted EPS[2]. For further information see Note 15 to our consolidated financial statements.

Business Outlook

As we seek to increase our commercial momentum and accelerate growth, our four strategic priorities are:

- Accelerating digital - growing our digital business organically and inorganically;
- Globalizing Cognizant - accelerating the growth of our business in key international markets and diversifying our leadership, capabilities and delivery footprint;
- Repositioning our brand - improving our global brand recognition and becoming better known as a global digital partner to the entire C-suite; and
- Increasing our relevance to our clients - leading with thought leadership and capabilities to address clients' business needs.

We continue to expect the long-term focus of our clients to be on their digital transformation into software-driven, data-enabled, customer-centric and differentiated businesses. The COVID-19 pandemic accelerated our clients' need to modernize their business, which has led to increased demand for digital capabilities. In 2021, we completed seven acquisitions intended to expand our talent, experience and capabilities in key digital areas or in particular geographies or industries.

As our clients seek to optimize the cost of supporting their legacy systems and operations, our non-digital services have been and may continue to be subject to pricing pressure. In addition, our clients will likely continue to contend with industry-specific changes driven by evolving digital technologies, uncertainty in the regulatory environment, industry consolidation and convergence as well as international trade policies and other macroeconomic factors, which could affect their demand for our services.

As a global professional services company, we compete on the basis of the knowledge, experience, insights, skills and talent of our employees and the value they can provide to our clients. Our success is dependent, in large part, on our ability to keep our supply of skilled employees, in particular those with experience in key digital areas, in balance with client demand. Competition for skilled employees in the current labor market is intense, and we experienced significantly elevated voluntary attrition during 2021. For the three months ended December 31, 2021, our annualized attrition rate, including both voluntary and involuntary, was 34.6% as compared to 19.0% for the three months ended December 31, 2020. For the year ended December 31, 2021, our attrition rate, including both voluntary and involuntary, was 30.8% as compared to 20.6% for the year ended December 31, 2020. Challenges attracting and retaining highly qualified personnel have negatively impacted our ability to satisfy client demand and achieve our full revenue potential. We expect this impact to continue in 2022. Further, our ongoing and anticipated future efforts with respect to recruitment, talent management and employee engagement may not be successful and may result in increased delivery costs during 2022. Our most significant costs are the salaries and related benefits for our employees. In certain regions, competition for employees with the advanced technical skills necessary to perform our services has caused wages to increase at a rate greater than the general rate of inflation. While we strive to adjust pricing to reduce the

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[2] Adjusted Operating Margin and Adjusted Diluted EPS are not measurements of financial performance prepared in accordance with GAAP. See "Non-GAAP Financial Measures" for more information and reconciliations to the most directly comparable GAAP financial measures.

impact of compensation increases on our operating margin, we may not be successful in fully recovering these increases, which could adversely affect our profitability and operating margin.

Our future results may be affected by potential tax law changes and other potential regulatory changes, including possible U.S. corporate income tax reform and potentially increased costs for employment and post-employment benefits in India as a result of the Code on Social Security, 2020. For additional information, see Part I, Item 1A. Risk Factors.

Environmental, Social and Corporate Governance

We believe environmental and social considerations are increasingly important to our clients and the talent we seek to attract and retain. As a company committed to improving everyday life, ESG is an important part of our business and that of our clients. Cognizant's vision is to become the preeminent technology services provider to the leaders of the world's Global 2000 companies. Our ESG program is designed to support that vision and aligns with our clients' increasing focus on ESG. In 2021, we took the following steps to advance our ESG agenda:

- In February 2021, we announced an initiative to advance economic mobility, educational opportunity, diversity, equity, and inclusion, and health and well-being in communities around the world through new philanthropic funding and in-kind contributions;
- In April 2021, as the second wave of the COVID-19 pandemic gripped India, we launched Operation C3. This initiative facilitated vaccination for our Indian employees and their dependents, and set up vaccination drives across the country to help senior citizens, physically challenged dependents, and mothers with infants. Operation C3 also provided critical medical equipment to hospitals, helped to boost oxygen supplies and more;
- In June 2021, we issued our first ESG report with assured greenhouse gas emissions data;
- In October 2021, we announced our commitment to achieve net zero emissions by 2030. This pledge calls for reducing emissions by 50% from the Company's global operations and supply chain by 2030, and by 90% by 2040; and
- In October 2021, we launched "All Belong," an initiative led by our executive committee and global D&I team designed to strengthen employee engagement, showcase our affinity groups, and recognize employees who exemplify inclusion.

Results of Operations

For a discussion of our results of operations for the year ended December 31, 2019, including a year-to-year comparison between 2020 and 2019, refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our Annual Report Form 10-K for the year ended December 31, 2020.

The Year Ended December 31, 2021 Compared to The Year Ended December 31, 2020

The following table sets forth certain financial data for the years ended December 31:

(Dollars in millions, except per share data)	2021	% of Revenues	2020	% of Revenues	Increase / Decrease $	Increase / Decrease %
Revenues	$ 18,507	100.0	$ 16,652	100.0	$ 1,855	11.1
Cost of revenues(1)	11,604	62.7	10,671	64.1	933	8.7
Selling, general and administrative expenses(1)	3,503	18.9	3,100	18.6	403	13.0
Restructuring charges	—	—	215	1.3	(215)	(100.0)
Depreciation and amortization expense	574	3.1	552	3.3	22	4.0
Income from operations	2,826	15.3	2,114	12.7	712	33.7
Other income (expense), net	1		(18)		19	(105.6)
Income before provision for income taxes	2,827	15.3	2,096	12.6	731	34.9
Provision for income taxes	(693)		(704)		11	(1.6)
Income (loss) from equity method investments	3		—		3	*
Net income	$ 2,137	11.5	$ 1,392	8.4	$ 745	53.5
Diluted EPS	$ 4.05		$ 2.57		$ 1.48	57.6
Other Financial Information [3]						
Adjusted Income From Operations and Adjusted Operating Margin	$ 2,846	15.4	$ 2,394	14.4	$ 452	18.9
Adjusted Diluted EPS	$ 4.12		$ 3.42		$ 0.70	20.5

(1) Exclusive of depreciation and amortization expense.
* Not meaningful

Revenues - Overall

During 2021, revenues increased by $1,855 million as compared to 2020, representing growth of 11.1%, or 10.0% on a constant currency basis[3]. Our recently completed acquisitions contributed 320 basis points to our revenue growth. Our revenue growth also reflected our clients' continued adoption and integration of digital technologies and was aided by the negative impact on 2020 revenues of the COVID-19 pandemic. Our 2020 revenue was negatively affected by the Samlink Impact, which contributed approximately 70 basis points to our 2021 revenue growth. We continue to experience pricing pressure on our non-digital services as our clients, particularly those in the Financial Services segment, optimize the cost of supporting their legacy systems and operations. Revenues from clients added during 2021, including those related to acquisitions, were $341 million.

[3] Adjusted Income From Operations, Adjusted Operating Margin, Adjusted Diluted EPS and constant currency revenue growth are not measurements of financial performance prepared in accordance with GAAP. See “Non-GAAP Financial Measures” for more information and reconciliations to the most directly comparable GAAP financial measures, as applicable.

Revenues - Reportable Business Segments

The following charts set forth revenues and change in revenues by business segment and geography for the year ended December 31, 2021 as compared to the year ended December 31, 2020:

	Financial Services				Healthcare			
		Increase / (Decrease)				Increase / (Decrease)		
Dollars in millions	**Revenues**	**$**	**%**	**CC %[4]**	**Revenues**	**$**	**%**	**CC %[4]**
North America	$ 4,204	191	4.8	4.4	$ 4,571	390	9.3	9.3
United Kingdom	547	84	18.1	12.5	168	11	7.0	2.3
Continental Europe	745	116	18.4	14.4	477	43	9.9	7.0
Europe - Total	1,292	200	18.3	13.6	645	54	9.1	5.7
Rest of World	555	39	7.6	5.2	121	41	51.3	50.9
Total	$ 6,051	430	7.6	6.3	$ 5,337	485	10.0	9.6

	Products and Resources				Communications, Media and Technology			
		Increase / (Decrease)				Increase / (Decrease)		
Dollars in millions	**Revenues**	**$**	**%**	**CC %[4]**	**Revenues**	**$**	**%**	**CC %[4]**
North America	$ 2,937	287	10.8	10.5	$ 1,924	187	10.8	10.7
United Kingdom	471	100	27.0	19.0	456	112	32.6	26.1
Continental Europe	539	126	30.5	25.7	158	(19)	(10.7)	(14.5)
Europe - Total	1,010	226	28.8	22.5	614	93	17.9	12.3
Rest of World	329	67	25.6	22.7	305	80	35.6	34.3
Total	$ 4,276	580	15.7	13.9	$ 2,843	360	14.5	13.2

Financial Services - revenues increased 7.6%, or 6.3% on a constant currency basis[4]

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Banking ↑ $307M

Insurance ↑ $123M

Revenue growth in this segment benefited from the 2020 Samlink Impact, which contributed approximately 220 basis points to our 2021 revenue growth, recently completed acquisitions and the negative impact on 2020 revenues of the COVID-19 pandemic. Revenue growth also reflects the growing demand for our digital services partially offset by clients' continued focus on cost optimization of supporting their legacy systems and operations. Revenues from clients added, including those related to acquisitions, since December 31, 2020 were $77 million.

Healthcare - revenues increased 10.0%, or 9.6% on a constant currency basis[4]

Revenue growth among our life sciences clients was driven by increased demand for our services among pharmaceutical companies while revenue growth among our healthcare customers benefited from increased demand by health insurance customers for our integrated software solutions. Additionally, revenue growth reflected the negative impact on 2020 revenues of the COVID-19 pandemic. Revenues from clients added since December 31, 2020 were $45 million.

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Healthcare ↑ $231M

Life Sciences ↑ $254M

[4] Constant currency revenue growth is not a measurement of financial performance prepared in accordance with GAAP. See "Non-GAAP Financial Measures" for more information.

Products and Resources - revenues increased 15.7%, or 13.9% on a constant currency basis[5]

Manufacturing, Logistics, Energy and Utilities	↑	$383M
Retail and Consumer Goods	↑	$155M
Travel and Hospitality	↑	$42M

Revenues from our manufacturing, logistics, energy and utilities clients benefited from our clients' adoption and integration of digital technologies. Revenue growth in this segment included approximately 500 basis points related to recently completed acquisitions. Additionally, revenue growth reflected the negative impact of the COVID-19 pandemic on our 2020 revenue in this segment. Revenues from clients added, including those related to acquisitions, since December 31, 2020 were $113 million.

Communications, Media and Technology - revenues increased 14.5%, or 13.2% on a constant currency basis[5]

Revenues reflected growing demand from our technology clients for services related to digital content, primarily driven by our largest clients in this segment, and were negatively impacted by 190 basis points due to our exit from certain content-related services. Revenue growth in this segment included approximately 650 basis points related to recently completed acquisitions and also reflected the negative impact to our 2020 revenue of the COVID-19 pandemic. Revenues from clients added, including those related to acquisitions, since December 31, 2020 were $106 million.

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Communications and Media	↑	$150M
Technology	↑	$210M

s - Geographic Markets

Revenues of $18,507 million by geographic market were as follows for the year ended December 31, 2021:

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2021 as compared to 2020	Increase / (Decrease)		
(Dollars in millions)	$	%	CC %[5]
North America	$ 1,055	8.4	8.2
United Kingdom	307	23.0	16.6
Continental Europe	266	16.1	12.2
Europe - Total	573	19.2	14.2
Rest of World	227	21.0	18.8
Total revenues	$ 1,855	11.1	10.0

North America continues to be our largest market, representing 73.7% of total revenues and 56.9% of total growth for the year ended December 31, 2021. Revenue growth across all regions benefited from our recently completed acquisitions and was also aided by the negative impact on our 2020 revenues of the COVID-19 pandemic. All regions also benefited from favorable foreign currency exchange rate movements. A significant portion of revenue growth in our Continental Europe and Rest of World regions was driven by our German and Australian markets, respectively, which both benefited from recent acquisitions. In addition, revenue growth in Continental Europe benefited 770 basis points from the 2020 Samlink Impact.

[5] Constant currency revenue growth is not a measurement of financial performance prepared in accordance with GAAP. See "Non-GAAP Financial Measures" for more information.

Cost of Revenues (Exclusive of Depreciation and Amortization Expense)

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$933M

1.4% as a % of revenue

% of Revenues

Our cost of revenues consists primarily of salaries, incentive-based compensation, stock-based compensation expense, employee benefits, project-related immigration and travel for technical personnel, subcontracting and equipment costs relating to revenues. The decrease in cost of revenues, as a percentage of revenues, was due primarily to savings from the implementation of the delivery cost optimization initiatives of our 2020 Fit for Growth Plan, the adverse Samlink Impact in 2020, a decrease in travel and entertainment costs as a result of a reduction in travel due to the COVID-19 pandemic as well as the negative impact on our 2020 results from the pandemic and the April 2020 ransomware attack, partially offset by increased subcontractor and compensation costs as a result of significantly elevated employee attrition levels.

SG&A Expenses (Exclusive of Depreciation and Amortization Expense)

SG&A expenses consist primarily of salaries, incentive-based compensation, stock-based compensation expense, employee benefits, immigration, travel, marketing, communications, management, finance, administrative and occupancy costs. The increase, as a percentage of revenues, was due primarily to investments intended to drive and support organic revenue growth, including additions to our sales organization and initiatives to reposition our brand, as well as increased costs as a result of our recently completed acquisitions and costs related to the modernization of our core IT systems, partially offset by a reduction in expenses attributable to the COVID-19 pandemic and the April 2020 ransomware attack.

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$403M

0.3% as a % of revenue

% of Revenues

Depreciation and Amortization Expense

Depreciation and amortization expense increased by 4.0% during 2021 as compared to 2020 primarily due to amortization of intangibles from recently completed acquisitions.

g Margin and Adjusted Operating Margin[6] - Overall

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Our 2021 GAAP and Adjusted Operating Margins[6] benefited from savings generated by the implementation of the delivery cost optimization initiatives of our 2020 Fit for Growth Plan and a decrease in travel and entertainment costs. These benefits were partially offset by investments intended to drive and support organic revenue growth, including additions to our sales organization and initiatives to reposition our brand, as well as the negative impact on margin of our recently completed acquisitions, increased subcontractor and compensation costs as a result of significantly elevated employee attrition and costs related to the modernization of our core IT systems. Our 2020 operating margins were adversely impacted by the decline in revenues brought on by the COVID-19 pandemic, the Samlink Impact and the April 2020 ransomware attack. Our 2020 GAAP operating margin was also negatively impacted by costs related to our restructuring program that concluded at the end of 2020 and COVID-19 Charges.

[6] Adjusted Income From Operations and Adjusted Operating Margin are not measurements of financial performance prepared in accordance with GAAP. See "Non-GAAP Financial Measures" for more information and reconciliations to the most directly comparable GAAP financial measures, as applicable.

Excluding the impact of applicable designated cash flow hedges, the appreciation of the Indian rupee against the U.S. dollar negatively impacted our operating margin by approximately 5 basis points in 2021, while in 2020 the depreciation of the Indian rupee against the U.S. dollar positively impacted our operating margin by approximately 92 basis points. Each additional 1.0% change in exchange rate between the Indian rupee and the U.S. dollar will have the effect of moving our operating margin by approximately 18 basis points, excluding the impact of our cash flow hedges.

We enter into foreign exchange derivative contracts to hedge certain Indian rupee denominated payments in India. These hedges are intended to mitigate the volatility of the changes in the exchange rate between the U.S. dollar and the Indian rupee. In 2021, the settlement of our cash flow hedges positively impacted our operating margin by approximately 35 basis points. The impact of the settlement of our cash flow hedges was immaterial in 2020.

We finished the year ended December 31, 2021 with approximately 330,600 employees as compared to 289,500 employees for the year ended December 31, 2020. Annualized attrition, including both voluntary and involuntary, was approximately 34.6% for the three months ended December 31, 2021. Attrition, including both voluntary and involuntary, was approximately 30.8% for the year ended December 31, 2021. In 2021, voluntary attrition was significantly elevated and constituted the vast majority of our attrition for the period. By comparison, voluntary attrition in the year ended December 31, 2020 represented only approximately half of our attrition for the period as our personnel actions taken under our Fit for Growth Plan increased involuntary attrition while voluntary attrition was suppressed due to the COVID-19 pandemic. Attrition in all periods presented is weighted towards our more junior level employees.

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* Annualized attrition

Segment Operating Profit

Segment operating profit and operating margin percentage were as follows:

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Across all our business segments, operating margins benefited from savings from the implementation of the delivery cost optimization initiatives of our 2020 Fit for Growth Plan, the decrease in travel and entertainment costs due to COVID-19 related reductions in travel and the negative impact on our 2020 results of the COVID-19 pandemic and the April 2020 ransomware attack. In 2021, segment operating margins were negatively impacted by increased subcontractor and compensation costs as a result of significantly elevated employee attrition levels. The 2020 operating margin in our Financial Services segment includes the 2020 adverse Samlink Impact.

Total segment operating profit was as follows for the year ended December 31:

(Dollars in millions)	2021	% of Revenues	2020	% of Revenues	Increase / (Decrease)
Total segment operating profit	$ 5,557	30.0	$ 4,704	28.2	$ 853
Less: unallocated costs	2,731		2,590		141
Income from operations	$ 2,826	15.3	$ 2,114	12.7	$ 712

The increase of $141 million in unallocated costs for the year ended December 31, 2021 as compared to the year ended December 31, 2020 was primarily due to increased costs as a result of our recently completed acquisitions and costs related to initiatives to reposition our brand and the modernization of our core IT systems. Unallocated costs in 2020 included restructuring costs, COVID-19 Charges and costs related to the April 2020 ransomware attack.

Other Income (Expense), Net

Total other income (expense), net consists primarily of foreign currency exchange gains and losses, interest income and interest expense. The following table sets forth total other income (expense), net for the years ended December 31:

(in millions)	2021	2020	Increase / Decrease
Foreign currency exchange (losses)	$ (33)	$ (53)	$ 20
Gains (losses) on foreign exchange forward contracts not designated as hedging instruments	13	(63)	76
Foreign currency exchange (losses), net	(20)	(116)	96
Interest income	30	119	(89)
Interest expense	(9)	(24)	15
Other, net	—	3	(3)
Total other income (expense), net	$ 1	$ (18)	$ 19

The foreign currency exchange gains and losses were primarily attributed to the remeasurement of the Indian rupee denominated net monetary assets and liabilities in our U.S. dollar functional currency India subsidiaries and, to a lesser extent, the remeasurement of other net monetary assets and liabilities denominated in currencies other than the functional currencies of our subsidiaries. The gains and losses on our foreign exchange forward contracts not designated as hedging instruments related to the realized and unrealized gains and losses on foreign exchange forward contracts entered into to offset foreign currency exposure to non-U.S. dollar denominated net monetary assets and liabilities. As of December 31, 2021, the notional value of our undesignated hedges was $847 million. The decrease in interest income of $89 million was primarily attributable to lower invested balances in India, which generate higher yields. Our invested balances in India are lower in 2021 as a result of our repatriation of cash from India in the fourth quarter of 2020.

Provision for Income Taxes

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↓ $11M

○ Effective Income Tax Rate ↓ 9.1%

The effective tax rate decreased primarily as a result of:

- our decision in 2020 to reverse our indefinite reinvestment assertion on Indian earnings accumulated in prior years which resulted in a $140 million Tax on Accumulated Indian Earnings recorded as income tax expense in 2020;
- the 2020 Samlink Impact, which was not deductible for tax purposes;
- the discrete benefit in 2021 of the settlement of the IRS examination for tax years 2012 through 2016 as described in Note 11 to our consolidated financial statements; and
- lower non-deductible foreign currency exchange losses in our consolidated statement of operations in 2021.

Net Income

The increase in net income was driven by higher income from operations and lower foreign currency exchange losses, partially offset by lower interest income.

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↑ $745M

○ % of Revenues

Non-GAAP Financial Measures

Portions of our disclosure include non-GAAP financial measures. These non-GAAP financial measures are not based on any comprehensive set of accounting rules or principles and should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and may be different from non-GAAP financial measures used by other companies. In addition, these non-GAAP financial measures should be read in conjunction with our financial statements prepared in accordance with GAAP. The reconciliations of our non-GAAP financial measures to the corresponding GAAP measures, set forth below, should be carefully evaluated.

Our non-GAAP financial measures, Adjusted Operating Margin, Adjusted Income From Operations and Adjusted Diluted EPS exclude unusual items. Additionally, Adjusted Diluted EPS excludes net non-operating foreign currency exchange gains or losses and the tax impact of all the applicable adjustments. The income tax impact of each item is calculated by applying the statutory rate and local tax regulations in the jurisdiction in which the item was incurred. Constant currency revenue growth is defined as revenues for a given period restated at the comparative period's foreign currency exchange rates measured against the comparative period's reported revenues. Free cash flow is defined as cash flows from operating activities net of purchases of property and equipment.

We believe providing investors with an operating view consistent with how we manage the Company provides enhanced transparency into our operating results. For our internal management reporting and budgeting purposes, we use various GAAP and non-GAAP financial measures for financial and operational decision-making, to evaluate period-to-period comparisons, to determine portions of the compensation for our executive officers and for making comparisons of our operating results to those of our competitors. Therefore, it is our belief that the use of non-GAAP financial measures excluding certain costs provides a meaningful supplemental measure for investors to evaluate our financial performance. We believe that the presentation of our non-GAAP financial measures along with reconciliations to the most comparable GAAP measure, as applicable, can provide useful supplemental information to our management and investors regarding financial and business trends relating to our financial condition and results of operations.

A limitation of using non-GAAP financial measures versus financial measures calculated in accordance with GAAP is that non-GAAP financial measures do not reflect all of the amounts associated with our operating results as determined in accordance with GAAP and may exclude costs that are recurring such as our net non-operating foreign currency exchange gains or losses. In addition, other companies may calculate non-GAAP financial measures differently than us, thereby limiting the usefulness of these non-GAAP financial measures as a comparative tool. We compensate for these limitations by providing specific information regarding the GAAP amounts excluded from our non-GAAP financial measures to allow investors to evaluate such non-GAAP financial measures.

The following table presents a reconciliation of each non-GAAP financial measure to the most comparable GAAP measure for the years ended December 31:

(Dollars in millions, except per share data)	2021	% of Revenues	2020	% of Revenues
GAAP income from operations and operating margin	$ 2,826	15.3 %	$ 2,114	12.7 %
Class Action Settlement Loss [(1)]	20	0.1	—	—
Realignment charges [(2)]	—	—	42	0.3
2020 Fit for Growth Plan restructuring charges [(3)]	—	—	173	1.0
COVID-19 Charges [(4)]	—	—	65	0.4
Adjusted Income From Operations and Adjusted Operating Margin	2,846	15.4	2,394	14.4
GAAP diluted EPS	$ 4.05		$ 2.57	
Effect of above adjustments, pre-tax	0.04		0.52	
Effect of non-operating foreign currency exchange losses (gains), pre-tax [(5)]	0.03		0.22	
Tax effect of above adjustments [(6)]	—		(0.15)	
Tax on Accumulated Indian Earnings [(7)]	—		0.26	
Adjusted Diluted EPS	$ 4.12		$ 3.42	
Net cash provided by operating activities	$ 2,495		$ 3,299	
Purchases of property and equipment	(279)		(398)	
Free cash flow	$ 2,216		$ 2,901	

(1) During 2021, we recorded the Class Action Settlement Loss in "Selling, general and administrative expenses" in our consolidated financial statements. See Note 15 to our consolidated financial statements for additional information.

(2) As part of our realignment program, during 2020, we incurred employee retention costs and certain professional fees. See Note 4 to our consolidated financial statements for additional information.

(3) As part of our 2020 Fit for Growth plan, during 2020, we incurred certain employee separation, employee retention and facility exit costs and other charges. See Note 4 to our consolidated financial statements for additional information.

(4) During 2020, we incurred costs in response to the COVID-19 pandemic including a one-time bonus to our employees at the designation of associate and below in both India and the Philippines, certain costs to enable our employees to work remotely and costs to provide medical staff and extra cleaning services for our facilities. Most of the costs related to the pandemic are reported in "Cost of revenues" in our consolidated statement of operations.

(5) Non-operating foreign currency exchange gains and losses, inclusive of gains and losses on related foreign exchange forward contracts not designated as hedging instruments for accounting purposes, are reported in "Foreign currency exchange gains (losses), net" in our consolidated statements of operations.

(6) Presented below are the tax impacts of each of our non-GAAP adjustments to pre-tax income:

(in millions)	For the years ended December 31, 2021	2020
Non-GAAP income tax benefit (expense) related to:		
Class Action Settlement Loss	$ 6	—
Realignment charges	—	11
2020 Fit for Growth Plan restructuring charges	—	45
COVID-19 Charges	—	17
Foreign currency exchange gains and losses	(5)	6

(7) In 2020, we reversed our indefinite reinvestment assertion on Indian earnings accumulated in prior years and recorded $140 million in income tax expense.

Liquidity and Capital Resources

Cash generated from operations has historically been our primary source of liquidity to fund operations and investments to grow our business. As of December 31, 2021, we had cash, cash equivalents and short-term investments of $2,719 million. Additionally, as of December 31, 2021, we had available capacity under our credit facilities of approximately $1,925 million.

The following table provides a summary of our cash flows for the years ended December 31:

(in millions)	2021	2020	Increase / Decrease
Net cash provided by (used in):			
Operating activities	$ 2,495	$ 3,299	$ (804)
Investing activities	(2,164)	(1,238)	(926)
Financing activities	(1,203)	(2,009)	806
Other Cash Flow Information[7]			
Free cash flow	2,216	2,901	(685)

Operating activities

The decrease in cash provided by operating activities in 2021 compared to 2020 was primarily driven by the deferrals of certain non-income tax payments due to COVID-19 pandemic regulatory relief in 2020, a portion of which was remitted in 2021, and higher incentive-based compensation payouts in 2021.

We monitor turnover, aging and the collection of trade accounts receivable by client. Our DSO calculation includes trade accounts receivable, net of allowance for credit losses, and contract assets, reduced by the uncollected portion of our deferred revenue. DSO was 69 days as of December 31, 2021 and 70 days as of December 31, 2020.

Investing activities

The increase in cash used in investing activities in 2021 compared to 2020 was primarily driven by net purchases of investments as compared to sales in 2020, partially offset by lower payments for acquisitions and capital expenditures.

[7] Free cash flow is not a measurement of financial performance prepared in accordance with GAAP. See “Non-GAAP Financial Measures” for more information.

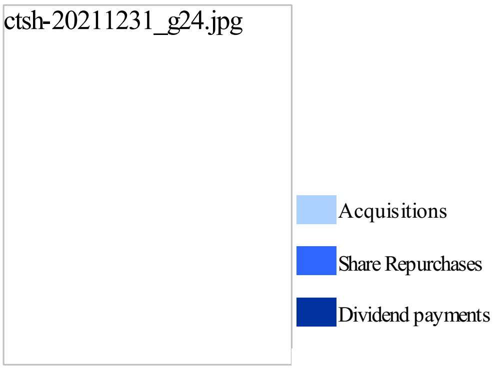
Financing activities

The decrease in cash used in financing activities in 2021 compared to 2020 is primarily due to lower repurchases of common stock in 2021.

We have a Credit Agreement providing for a $750 million Term Loan and a $1,750 million unsecured revolving credit facility, which are due to mature in November 2023. We are required under the Credit Agreement to make scheduled quarterly principal payments on the Term Loan. See Note 10 to our consolidated financial statements. We believe that we currently meet all conditions set forth in the Credit Agreement to borrow thereunder, and we are not aware of any conditions that would prevent us from borrowing part or all of the remaining available capacity under the revolving credit facility as of December 31, 2021 and through the date of this filing. As of December 31, 2021, we had no outstanding balance on our revolving credit facility.

In February 2021, our India subsidiary renewed its one-year 13 billion Indian rupee ($175 million at the December 31, 2021 exchange rate) working capital facility, which requires us to repay any balances drawn down within 90 days from the date of disbursement. There is a 1.0% prepayment penalty applicable to payments made within 30 days of disbursement. This working capital facility contains affirmative and negative covenants and may be renewed annually in February. As of December 31, 2021, there was no balance outstanding under the working capital facility.

Capital Allocation Framework



Our capital allocation framework anticipates the deployment of approximately 50% of our free cash flow[8] for acquisitions, 25% for share repurchases and 25% for dividend payments. We review our capital allocation framework on an ongoing basis, considering the potential impacts of COVID-19 pandemic, our financial performance and liquidity position, investments required to execute our strategic plans and initiatives, acquisition opportunities, the economic outlook, regulatory changes and other relevant factors. As these factors may change over time, the actual amounts expended on stock repurchase activity, dividends, and acquisitions, if any, during any particular period cannot be predicted and may fluctuate from time to time.

Other Liquidity and Capital Resources Information

We seek to ensure that our worldwide cash is available in the locations in which it is needed. As part of our ongoing liquidity assessments, we regularly monitor the mix of our domestic and international cash flows and cash balances. We evaluate on an ongoing basis what portion of the non-U.S. cash, cash equivalents and short-term investments is needed locally to execute our strategic plans and what amount is available for repatriation back to the United States.

We expect our operating cash flows, cash and short-term investment balances, together with our available capacity under our revolving credit facilities, to be sufficient to meet our operating requirements, pay our purchase commitments and Tax Reform Act transition tax payments and service our debt for the next twelve months. Our Tax Reform Act transition tax payments are due in annual installments of $50 million, $94 million, $126 million and $157 million through 2025. We also have purchase commitments of approximately $263 million which will be paid over the next two years. See Note 7 to our consolidated financial statements for a description of our operating lease obligations.

Our ability to expand and grow our business in accordance with current plans, make acquisitions, meet our long-term capital requirements beyond a twelve-month period and execute our capital allocation framework will depend on many factors, including the rate, if any, at which our cash flow increases, our ability and willingness to pay for acquisitions with capital stock and the availability of public and private debt and equity financing. We cannot be certain that additional financing, if required, will be available on terms and conditions acceptable to us, if at all.

[8] Free cash flow is not a measurement of financial performance prepared in accordance with GAAP. See “Non-GAAP Financial Measures” for more information.

Critical Accounting Estimates

Management's discussion and analysis of our financial condition and results of operations is based on our accompanying consolidated financial statements that have been prepared in accordance with GAAP. We base our estimates on historical experience, current trends and on various other assumptions that are believed to be relevant at the time our consolidated financial statements are prepared. We evaluate our estimates on a continuous basis. However, the actual amounts may differ from the estimates used in the preparation of our consolidated financial statements.

We believe the following accounting estimates are the most critical to aid in fully understanding and evaluating our consolidated financial statements as they require the most difficult, subjective or complex judgments, resulting from the need to make estimates about the effect of matters that are inherently uncertain. Changes to these estimates could have a material effect on our results of operations and financial condition. Our significant accounting policies are described in Note 1 to our consolidated financial statements.

Revenue Recognition. Revenues related to fixed-price contracts for application development and systems integration services, consulting or other technology services are recognized as the service is performed using the cost to cost method, under which the total value of revenues is recognized on the basis of the percentage that each contract's total labor cost to date bears to the total expected labor costs. Revenues related to fixed-price application maintenance, testing and business process services are recognized using the cost to cost method, if the right to invoice is not representative of the value being delivered. The cost to cost method requires estimation of future costs, which is updated as the project progresses to reflect the latest available information. Such estimates and changes in estimates involve the use of judgment. The cumulative impact of any revision in estimates is reflected in the financial reporting period in which the change in estimate becomes known. Net changes in estimates of such future costs and contract losses were immaterial to the consolidated results of operations for the periods presented.

Income Taxes. Determining the consolidated provision for income tax expense, deferred income tax assets (and related valuation allowance, if any) and liabilities requires significant judgment. We are required to calculate and provide for income taxes in each of the jurisdictions where we operate. Changes in the geographic mix of income before taxes or estimated level of annual pre-tax income can affect our overall effective income tax rate. In addition, transactions between our affiliated entities are arranged in accordance with applicable transfer pricing laws, regulations and relevant guidelines. As a result, and due to the interpretive nature of certain aspects of these laws and guidelines, we have pending applications for APAs before the taxing authorities in some of our most significant jurisdictions. It could take years for the relevant taxing authorities to negotiate and conclude these applications. The consolidated provision for income taxes may change period to period based on changes in facts and circumstances, such as settlements of income tax audits or finalization of our applications for APAs.

Our provision for income taxes also includes the impact of reserves established for uncertain income tax positions, as well as the related interest, which may require us to apply judgment to complex issues and may require an extended period of time to resolve. Although we believe we have adequately reserved for our uncertain tax positions, no assurance can be given that the final outcome of these matters will not differ from our recorded amounts. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit. To the extent that the final outcome of these matters differs from the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made.

Business Combinations, Goodwill and Intangible Assets. Goodwill and intangible assets, including indefinite-lived intangible assets, arise from the accounting for business combinations. We account for business combinations using the acquisition method which requires us to estimate the fair value of identifiable assets acquired, liabilities assumed, including any contingent consideration, and any noncontrolling interest in the acquiree to properly allocate purchase price to the individual assets acquired and liabilities assumed. The allocation of the purchase price utilizes estimates and assumptions in determining the fair values of identifiable assets acquired and liabilities assumed, especially with respect to intangible assets, including the timing and amount of forecasted revenues and cash flows, anticipated growth rates, client attrition rates and the discount rate reflecting the risk inherent in future cash flows.

We exercise judgment to allocate goodwill to the reporting units expected to benefit from each business combination. Goodwill is tested for impairment at the reporting unit level on an annual basis 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, regulatory environment, established business plans, operating performance indicators or competition. Evaluation of goodwill for impairment requires judgment, including the identification of reporting units, assignment of assets, liabilities and goodwill to reporting units and determination of the fair value of each reporting unit.

We estimate the fair value of our reporting units using a combination of an income approach, utilizing a discounted cash flow analysis, and a market approach, using market multiples. Under the income approach, we estimate projected future cash flows, the timing of such cash flows and long-term growth rates, and determine the appropriate discount rate that reflects the risk inherent in the projected future cash flows. The discount rate used is based on a market participant weighted-average cost of capital and may be adjusted for the relevant risk associated with business-specific characteristics and the uncertainty related to the reporting unit’s ability to execute on the projected future cash flows. Under the market approach, we estimate fair value based on market multiples of revenues and earnings derived from comparable publicly-traded companies with characteristics similar to the reporting unit. 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 for each reporting unit.

Based on our most recent evaluation of goodwill performed during the fourth quarter of 2021, we concluded that the goodwill in each of our reporting units were not at risk of impairment. As of December 31, 2021, our goodwill balance was $5,620 million.

We review our finite-lived assets, including our finite-lived intangible assets, for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. The carrying amount may not be recoverable when the sum of undiscounted expected future cash flows is less than the carrying amount of such asset groups. The impairment loss is determined as the amount by which the carrying amount of the asset group exceeds its fair value. Assessing the fair value of asset groups involves significant estimates and assumptions including estimation of future cash flows, the timing of such cash flows and discount rates reflecting the risk inherent in future cash flows.

Recently Adopted and New Accounting Pronouncements

See Note 1 to our consolidated financial statements for additional information.

Forward Looking Statements

The statements contained in this Annual Report on Form 10-K that are not historical facts are forward-looking statements (within the meaning of Section 21E of the Exchange Act) that involve risks and uncertainties. Such forward-looking statements may be identified by, among other things, the use of forward-looking terminology such as “believe,” “expect,” “may,” “could,” “would,” “plan,” “intend,” “estimate,” “predict,” “potential,” “continue,” “should” or “anticipate” or the negative thereof or other variations thereon or comparable terminology, or by discussions of strategy that involve risks and uncertainties. From time to time, we or our representatives have made or may make forward-looking statements, orally or in writing.

Such forward-looking statements may be included in various filings made by us with the SEC, in press releases or in oral statements made by or with the approval of one of our authorized executive officers. These forward-looking statements, such as statements regarding our anticipated future revenues or operating margin, earnings, capital expenditures, impacts to our business, financial results and financial condition as a result of the COVID-19 pandemic, the competitive marketplace for talent and future attrition trends, anticipated effective income tax rate and income tax expense, liquidity, access to capital, capital return strategy, investment strategies, cost management, plans and objectives, including those related to our digital practice areas, investment in our business, potential acquisitions, industry trends, client behaviors and trends, the outcome of and costs associated with regulatory and litigation matters, the appropriateness of the accrual related to the India Defined Contribution Obligation and other statements regarding matters that are not historical facts, are based on our current expectations, estimates and projections, management’s beliefs and certain assumptions made by management, many of which, by their nature, are inherently uncertain and beyond our control. Actual results, performance, achievements and outcomes could differ materially from the results expressed in, or anticipated or implied by, these forward-looking statements. There are a number of important factors that could cause our results to differ materially from those indicated by such forward-looking statements, including:

- economic and political conditions globally and in particular in the markets in which our clients and operations are concentrated;
- the continuing impact of the COVID-19 pandemic, or other future pandemics, on our business, results of operations, liquidity and financial condition;
- our ability to attract, train and retain skilled employees, including highly skilled technical personnel to satisfy client demand and senior management to lead our business globally;
- challenges related to growing our business organically as well as inorganically through acquisitions, and our ability to achieve our targeted growth rates;
- our ability to achieve our profitability goals and maintain our capital return strategy;

- our ability to meet specified service levels or milestones required by certain of our contracts;
- intense and evolving competition and significant technological advances that our service offerings must keep pace with in the rapidly changing markets we compete in;
- legal, reputation and financial risks if we fail to protect client and/or our data from security breaches and/or cyber attacks;
- the effectiveness of our risk management, business continuity and disaster recovery plans and the potential that our global delivery capabilities could be impacted;
- restrictions on visas, in particular in the United States, United Kingdom and EU, or immigration more generally or increased costs of such visas or the wages we are required to pay employees on visas, which may affect our ability to compete for and provide services to our clients;
- risks related to anti-outsourcing legislation, if adopted, and negative perceptions associated with offshore outsourcing, both of which could impair our ability to serve our clients;
- risks and costs related to complying with numerous and evolving legal and regulatory requirements and client expectations in the many jurisdictions in which we operate;
- potential changes in tax laws, or in their interpretation or enforcement, failure by us to adapt our corporate structure and intercompany arrangements to achieve global tax efficiencies or adverse outcomes of tax audits, investigations or proceedings;
- potential exposure to litigation and legal claims in the conduct of our business; and
- the factors set forth in Part I, in the section entitled "Item 1A. Risk Factors" in this report.

You are advised to consult any further disclosures we make on related subjects in the reports we file with the SEC, including this report in the sections titled "Part I, Item 1. Business," "Part I, Item 1A. Risk Factors" and "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations." We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required under applicable securities laws.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Risk

We are exposed to foreign currency exchange rate risk in the ordinary course of doing business as we transact or hold a portion of our funds in foreign currencies, particularly the Indian rupee. Accordingly, we periodically evaluate the need for hedging strategies, including the use of derivative financial instruments, to mitigate the effect of foreign currency exchange rate fluctuations and expect to continue to use such instruments in the future to reduce foreign currency exposure to changes in the value of certain foreign currencies. All hedging transactions are authorized and executed pursuant to regularly reviewed policies and procedures.

Revenues from our clients in the United Kingdom, Continental Europe and Rest of World represented 8.9%, 10.3% and 7.1%, respectively, of our 2021 revenues, and are typically denominated in currencies other than the U.S. dollar. Accordingly, our revenues may be affected by fluctuations in the exchange rates, primarily the British pound and the Euro, as compared to the U.S. dollar.

A significant portion of our costs in India are denominated in the Indian rupee, representing 21.2% of our global operating costs during 2021, and are subject to foreign currency exchange rate fluctuations. These foreign currency exchange rate fluctuations have an impact on our results of operations.

We have entered into a series of foreign exchange forward and option contracts that are designated as cash flow hedges of certain Indian rupee denominated payments in India. These U.S. dollar / Indian rupee hedges are intended to partially offset the impact of movement of exchange rates on future operating costs. As of December 31, 2021, the notional value and weighted average contract rates of these contracts by year of maturity were as follows:

	Notional Value (in millions)		Weighted Average Contract Rate (Indian rupee to U.S. dollar)
2022	$	1,643	78.7
2023		880	80.9
Total	$	2,523	79.4

As of December 31, 2021, the net unrealized gain on our outstanding foreign exchange forward and option contracts designated as cash flow hedges was $66 million. Based upon a sensitivity analysis at December 31, 2021, which estimates the fair value of the contracts assuming certain market exchange rate fluctuations, a 10.0% change in the foreign currency exchange rate against the U.S. dollar with all other variables held constant would have resulted in a change in the fair value of our foreign exchange forward and option contracts designated as cash flow hedges of approximately $249 million.

A portion of our balance sheet is exposed to foreign currency exchange rate fluctuations, which may result in non-operating foreign currency exchange gains or losses upon remeasurement. In 2021, we reported foreign currency exchange losses, exclusive of hedging losses, of approximately $33 million, which were primarily attributed to the remeasurement of net monetary assets and liabilities denominated in currencies other than the functional currencies of our subsidiaries. We use foreign exchange forward contracts that are scheduled to mature in 2022 to provide an economic hedge against balance sheet exposure to certain monetary assets and liabilities denominated in currencies other than the functional currency of the subsidiary. At December 31, 2021, the notional value of these outstanding contracts was $847 million and the net unrealized loss was $4 million. Based upon a sensitivity analysis of our foreign exchange forward contracts at December 31, 2021, which estimates the fair value of the contracts assuming certain market exchange rate fluctuations, a 10.0% change in the foreign currency exchange rate against the U.S. dollar with all other variables held constant would have resulted in a change in the fair value of approximately $21 million.

Interest Rate Risk

We have a Credit Agreement providing for a $750 million unsecured Term Loan and a $1,750 million unsecured revolving credit facility, which are due to mature in November 2023. We are required under the Credit Agreement to make scheduled quarterly principal payments on the Term Loan.

The Credit Agreement requires interest to be paid, at our option, at either the ABR, the Eurocurrency Rate or the Daily Simple RFR (each as defined in the Credit Agreement), plus, in each case, an Applicable Margin (as defined in the Credit Agreement). Initially, the Applicable Margin is 0.875% with respect to Eurocurrency Rate and Daily Simple RFR and 0.00%

with respect to ABR loans. Subsequently, the Applicable Margin with respect to Eurocurrency Rate and Daily Simple RFR may range from 0.75% to 1.125%, depending on our public debt ratings (or, if we have not received public debt ratings, from 0.875% to 1.125%, depending on our Leverage Ratio, which is the ratio of indebtedness for borrowed money to Consolidated EBITDA, as defined in the Credit Agreement). The Term Loan is a Eurocurrency loan. Thus, our debt exposes us to market risk from changes in interest rates. We performed a sensitivity analysis to determine the effect of interest rate fluctuations on our interest expense. A 10.0% change in interest rates, with all other variables held constant, would have an immaterial effect on our reported interest expense.

Information provided by the sensitivity analysis of foreign currency risk and interest rate risk does not necessarily represent the actual changes that would occur under normal market conditions.

Item 8. Financial Statements and Supplementary Data

The financial statements required to be filed pursuant to this Item 8 are appended to this Annual Report on Form 10-K. A list of the financial statements filed herewith is found in Part IV, "Item 15. Exhibits, Financial Statements and Financial Statement Schedule."

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, under the supervision and with the participation of our chief executive officer and our chief financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of December 31, 2021. Based on this evaluation, our chief executive officer and our chief financial officer concluded that, as of December 31, 2021, our disclosure controls and procedures were effective.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended) that occurred during the fiscal quarter ended December 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the Company's independent registered public accounting firm and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rule 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended, and is a process designed by, or under the supervision of, our chief executive and chief financial officers and effected by our Board of Directors, management and other personnel, 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 and includes those policies and procedures that:

- Pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;
- 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 our management and directors; and
- 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.

Our management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2021. In making this assessment, the Company's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (2013)*.

Based on its evaluation, our management has concluded that, as of December 31, 2021, our internal control over financial reporting was effective. PricewaterhouseCoopers LLP, the independent registered public accounting firm that audited the financial statements included in this annual report, has issued an attestation report on our internal control over financial reporting, as stated in their report which is included on page F-2.

Inherent Limitations of Internal Controls

Because of its inherent limitations, internal control over financial reporting may not prevent or detect all misstatements. 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.

Item 9B. Other Information

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information relating to our executive officers in response to this item is contained in part under the caption "Information About Our Executive Officers" in Part I of this Annual Report on Form 10-K.

We have adopted a written code of ethics, entitled "Code of Ethics," that applies to all of our directors, executive officers and employees, including our principal executive officer, principal financial officer, principal accounting officer and controller, or persons performing similar functions. We make available our code of ethics free of charge through our website which is located at *www.cognizant.com*. We intend to post on our website all disclosures that are required by law or Nasdaq Stock Market listing standards concerning any amendments to, or waivers from, any provision of our code of ethics.

The remaining information required by this item will be included in our definitive proxy statement for the 2022 Annual Meeting of Stockholders and is incorporated herein by reference to such proxy statement.

Item 11. Executive Compensation

The information required by this item will be included in our definitive proxy statement for the 2022 Annual Meeting of Stockholders and is incorporated herein by reference to such proxy statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item will be included in our definitive proxy statement for the 2022 Annual Meeting of Stockholders and is incorporated herein by reference to such proxy statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item will be included in our definitive proxy statement for the 2022 Annual Meeting of Stockholders and is incorporated herein by reference to such proxy statement.

Item 14. Principal Accountant Fees and Services

The information required by this item will be included in our definitive proxy statement for the 2022 Annual Meeting of Stockholders and is incorporated herein by reference to such proxy statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) (1) Consolidated Financial Statements.
Reference is made to the Index to Consolidated Financial Statements on Page F-1.

(2) Consolidated Financial Statement Schedule.
Reference is made to the Index to Financial Statement Schedule on Page F-1.

(3) Exhibits.

Schedules other than as listed above are omitted as not required or inapplicable or because the required information is provided in the consolidated financial statements, including the notes thereto.

EXHIBIT INDEX

		Incorporated by Reference				
Number	Exhibit Description	Form	File No.	Exhibit	Date	Filed or Furnished Herewith
3.1	Restated Certificate of Incorporation, dated June 5, 2018	8-K	000-24429	3.1	6/7/2018	
3.2	Amended and Restated Bylaws, as adopted on September 24, 2018	8-K	000-24429	3.1	9/20/2018	
4.1	Specimen Certificate for shares of Class A common stock	S-4/A	333-101216	4.2	1/30/2003	
4.2	Description of Capital Stock	10-K	000-24429	4.2	2/14/2020	
10.1†	Form of Indemnification Agreement for Directors and Officers	10-Q	000-24429	10.1	8/7/2013	
10.2†	Form of Amended and Restated Executive Employment and Non-Disclosure, Non-Competition, and Invention Assignment Agreement, between the Company and each of the following Executive Officers: Brian Humphries, Jan Siegmund, Becky Schmitt, Robert Telesmanic, Balu Ganesh Ayyar, Gregory Hyttenrauch, Ursula Morgenstern, Andrew Stafford and John Kim	10-K	000-24429	10.3	2/27/2018	
10.3†	Offer Letter, by and between the Company and Brian Humphries, acknowledged and agreed November 30, 2018	10-K	000-24429	10.4	2/19/2019	
10.4†	Offer Letter, by and between the Company and Jan Siegmund, acknowledged and agreed July 8, 2020	8-K	000-24429	10.1	7/29/2020	
10.5†	Offer Letter, by and between the Company and Becky Schmitt, acknowledged and agreed November 26, 2019	10-K	000-24429	10.6	2/12/2021	
10.6†	Offer Letter, by and between the Company and Rajesh Nambiar, acknowledged and agreed September 16, 2020					Filed
10.7†	2004 Employee Stock Purchase Plan (as amended and restated effective as of January 1, 2022)					Filed
10.8†	Form of Stock Option Certificate	10-Q	000-24429	10.1	11/8/2004	

Number	Exhibit Description	Incorporated by Reference Form	File No.	Exhibit	Date	Filed or Furnished Herewith
10.9†	Cognizant Technology Solutions Corporation Amended and Restated 2009 Incentive Compensation Plan, effective March 9, 2015	10-Q	000-24429	10.1	5/4/2015	
10.10†	Form of Cognizant Technology Solutions Corporation Stock Option Agreement	8-K	000-24429	10.1	7/6/2009	
10.11†	Form of Cognizant Technology Solutions Corporation Notice of Grant of Stock Option	8-K	000-24429	10.2	7/6/2009	
10.12†	Form of Cognizant Technology Solutions Corporation Restricted Stock Unit Award Agreement Time-Based Vesting	8-K	000-24429	10.3	7/6/2009	
10.13†	Form of Cognizant Technology Solutions Corporation Notice of Award of Restricted Stock Units Time-Based Vesting	8-K	000-24429	10.4	7/6/2009	
10.14†	Form of Cognizant Technology Solutions Corporation Restricted Stock Unit Award Agreement Performance-Based Vesting	8-K	000-24429	10.5	7/6/2009	
10.15†	Form of Cognizant Technology Solutions Corporation Notice of Award of Restricted Stock Units Performance-Based Vesting	8-K	000-24429	10.6	7/6/2009	
10.16†	Form of Restricted Stock Unit Award Agreement Non-Employee Director Deferred Issuance	8-K	000-24429	10.7	7/6/2009	
10.17†	Form of Cognizant Technology Solutions Corporation Notice of Award of Restricted Stock Units Non-Employee Director Deferred Issuance	8-K	000-24429	10.8	7/6/2009	
10.18†	Cognizant Technology Solutions Corporation 2017 Incentive Award Plan	8-K	000-24429	10.1	6/7/2017	
10.19†	Form of Restricted Stock Unit Award Grant Notice	10-Q	000-24429	10.2	8/3/2017	
10.20†	Form of Performance-Based Restricted Stock Unit Award Grant Notice	10-Q	000-24429	10.3	8/3/2017	
10.21†	Form of Restricted Stock Unit Award Grant Notice	10-Q	000-24429	10.4	8/3/2017	
10.22†	Form of Stock Option Grant Notice and Stock Option Agreement	10-Q	000-24429	10.5	8/3/2017	
10.23†	Form of Restricted Stock Unit Award Grant Notice (March 5, 2020 form)	10-Q	000-24429	10.1	5/8/2020	
10.24†	Form of Performance-Based Restricted Stock Unit Award Grant Notice (March 5, 2020 form)	10-Q	000-24429	10.2	5/8/2020	
10.25	Form of Accelerated Stock Repurchase Agreement	8-K	000-24429	10.1	3/14/2017	
10.26	Credit Agreement, dated as of November 6, 2018, among Cognizant Technology Solutions Corporation, Cognizant Worldwide Limited, certain financial institutions party thereto and JPMorgan Chase Bank, N.A., as administrative agent	8-K	000-24429	10.1	11/9/2018	
10.27	Amendment No. 1 to Credit Agreement, dated as of December 23, 2021, among Cognizant Technology Solutions Corporation, Cognizant Worldwide Limited, JPMorgan Chase Bank, N.A., as administrative agent					Filed
10.28†	Retirement, Death and Disability Policy	10-Q	000-24429	10.1	7/30/2020	

Number	Exhibit Description	Incorporated by Reference Form	File No.	Exhibit	Date	Filed or Furnished Herewith
21.1	List of subsidiaries of the Company					Filed
23.1	Consent of PricewaterhouseCoopers LLP					Filed
31.1	Certification Pursuant to Rule 13a-14(a) and 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Executive Officer)					Filed
31.2	Certification Pursuant to Rule 13a-14(a) and 15d-14(a) of the Exchange Act, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 (Chief Financial Officer)					Filed
32.1	Certification Pursuant to 18 U.S.C. Section 1350 (Chief Executive Officer)					Furnished
32.2	Certification Pursuant to 18 U.S.C. Section 1350 (Chief Financial Officer)					Furnished
101.INS	Inline XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					Filed
101.SCH	Inline XBRL Taxonomy Extension Schema Document					Filed
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document					Filed
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document					Filed
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document					Filed
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document					Filed
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)					Filed

† A management contract or compensatory plan or arrangement required to be filed as an exhibit pursuant to Item 15(a)(3) of Form 10-K.

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.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

By: /S/ BRIAN HUMPHRIES

Brian Humphries,
Chief Executive Officer
(Principal Executive Officer)

Date: **February 16, 2022**

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

Signature	Title	Date
/s/ BRIAN HUMPHRIES **Brian Humphries**	Chief Executive Officer and Director (Principal Executive Officer)	February 16, 2022
/s/ JAN SIEGMUND **Jan Siegmund**	Chief Financial Officer (Principal Financial Officer)	February 16, 2022
/s/ ROBERT TELESMANIC **Robert Telesmanic**	Senior Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer)	February 16, 2022
/s/ MICHAEL PATSALOS-FOX **Michael Patsalos-Fox**	Chairman of the Board and Director	February 16, 2022
/s/ ZEIN ABDALLA **Zein Abdalla**	Director	February 16, 2022
/s/ VINITA BALI **Vinita Bali**	Director	February 16, 2022
/s/ MAUREEN BREAKIRON-EVANS **Maureen Breakiron-Evans**	Director	February 16, 2022
/s/ ARCHANA DESKUS **Archana Deskus**	Director	February 16, 2022
/s/ JOHN M. DINEEN **John M. Dineen**	Director	February 16, 2022
/s/ LEO S. MACKAY, JR. **Leo S. Mackay, Jr.**	Director	February 16, 2022
/s/ JOSEPH M. VELLI **Joseph M. Velli**	Director	February 16, 2022
/s/ SANDRA S. WIJNBERG **Sandra S. Wijnberg**	Director	February 16, 2022

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION
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Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Cognizant Technology Solutions Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated statements of financial position of Cognizant Technology Solutions Corporation and its subsidiaries (the "Company") as of December 31, 2021 and 2020, and the related consolidated statements of operations, of comprehensive income, of stockholders' equity and of cash flows for each of the three years in the period ended December 31, 2021, including the related notes and financial statement schedule listed in the accompanying index (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2021, 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2019.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition – Expected Labor Costs to Complete for Certain Fixed-Price Contracts

As described in Notes 1 and 2 to the consolidated financial statements, fixed-price contracts comprised $7.3 billion of the Company's total revenues for the year ended December 31, 2021, which includes performance obligations where control is transferred over time. For performance obligations where control is transferred over time, revenues are recognized based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the deliverables to be provided. Management recognizes revenues related to fixed-price contracts for application development and systems integration services, consulting or other technology services as the service is performed using the cost to cost method, under which the total value of revenues is recognized on the basis of the percentage that each contract's total labor cost to date bears to the total expected labor costs. The cost to cost method requires estimation of future costs, which is updated as the project progresses to reflect the latest available information. Revenues related to fixed-price application maintenance, testing and business process services are recognized based on management's right to invoice for services performed for contracts in which the invoicing is representative of the value being delivered. If management's invoicing is not consistent with value delivered, revenues are recognized as the service is performed based on the cost to cost method described above.

The principal considerations for our determination that performing procedures relating to revenue recognition – expected labor costs to complete for certain fixed-price contracts is a critical audit matter are the significant judgment by management when developing the estimated total expected labor costs to complete fixed-price contracts and the significant auditor judgment, subjectivity, and effort in performing procedures and evaluating audit evidence relating to management's estimate of total expected labor costs.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the development of the estimated total expected labor costs to complete fixed-price contracts. These procedures also included, among others, evaluating and testing management's process for developing the estimated total expected labor costs for a sample of contracts, which included evaluating the reasonableness of the total expected labor cost assumptions used by management. Evaluating the reasonableness of the assumptions related to the total expected labor costs involved assessing management's ability to reasonably develop total expected labor costs by (i) performing a comparison of actual labor costs incurred with expected labor costs for similar completed projects and (ii) evaluating the timely identification of circumstances that may warrant a modification to previous labor cost estimates, including actual labor costs in excess of estimates.

/s/ PricewaterhouseCoopers LLP
New York, New York
February 16, 2022

We have served as the Company's auditor since 1997.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

	December 31,	
(in millions, except par values)	**2021**	**2020**
Assets		
Current assets:		
Cash and cash equivalents	$ 1,792	$ 2,680
Short-term investments	927	44
Trade accounts receivable, net	3,557	3,087
Other current assets	1,066	1,040
Total current assets	7,342	6,851
Property and equipment, net	1,171	1,251
Operating lease assets, net	933	1,013
Goodwill	5,620	5,031
Intangible assets, net	1,218	1,046
Deferred income tax assets, net	404	445
Long-term investments	463	440
Other noncurrent assets	701	846
Total assets	$ 17,852	$ 16,923
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 361	$ 389
Deferred revenue	403	383
Short-term debt	38	38
Operating lease liabilities	195	211
Accrued expenses and other current liabilities	2,532	2,519
Total current liabilities	3,529	3,540
Deferred revenue, noncurrent	40	36
Operating lease liabilities, noncurrent	783	846
Deferred income tax liabilities, net	218	206
Long-term debt	626	663
Long-term income taxes payable	378	428
Other noncurrent liabilities	287	368
Total liabilities	5,861	6,087
Commitments and contingencies (See Note 15)		
Stockholders' equity:		
Preferred stock, $0.10 par value, 15 shares authorized, none issued	—	—
Class A common stock, $0.01 par value, 1,000 shares authorized, 525 and 530 shares issued and outstanding as of December 31, 2021 and 2020, respectively	5	5
Additional paid-in capital	27	32
Retained earnings	11,922	10,689
Accumulated other comprehensive income (loss)	37	110
Total stockholders' equity	11,991	10,836
Total liabilities and stockholders' equity	$ 17,852	$ 16,923

The accompanying notes are an integral part of the consolidated financial statements.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
(in millions, except per share data)	**2021**	**2020**	**2019**
Revenues	$ 18,507	$ 16,652	$ 16,783
Operating expenses:			
Cost of revenues (exclusive of depreciation and amortization expense shown separately below)	11,604	10,671	10,634
Selling, general and administrative expenses	3,503	3,100	2,972
Restructuring charges	—	215	217
Depreciation and amortization expense	574	552	507
Income from operations	2,826	2,114	2,453
Other income (expense), net:			
Interest income	30	119	176
Interest expense	(9)	(24)	(26)
Foreign currency exchange gains (losses), net	(20)	(116)	(65)
Other, net	—	3	5
Total other income (expense), net	1	(18)	90
Income before provision for income taxes	2,827	2,096	2,543
Provision for income taxes	(693)	(704)	(643)
Income (loss) from equity method investments	3	—	(58)
Net income	$ 2,137	$ 1,392	$ 1,842
Basic earnings per share	$ 4.06	$ 2.58	$ 3.30
Diluted earnings per share	$ 4.05	$ 2.57	$ 3.29
Weighted average number of common shares outstanding—Basic	527	540	559
Dilutive effect of shares issuable under stock-based compensation plans	1	1	1
Weighted average number of common shares outstanding—Diluted	528	541	560

The accompanying notes are an integral part of the consolidated financial statements.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
(in millions)	**2021**	**2020**	**2019**
Net income	$ 2,137	$ 1,392	$ 1,842
Other comprehensive income (loss), net of tax:			
Foreign currency translation adjustments	(75)	119	39
Change in unrealized gains and losses on cash flow hedges	2	29	29
Change in unrealized losses on available-for-sale investment securities	—	—	8
Other comprehensive income (loss)	(73)	148	76
Comprehensive income	$ 2,064	$ 1,540	$ 1,918

The accompanying notes are an integral part of the consolidated financial statements.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(in millions, except per share data)	Class A Common Stock Shares	Class A Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
Balance, December 31, 2018	577	$ 6	$ 47	$ 11,485	$ (114)	$ 11,424
Cumulative effect of changes in accounting principle (1)	—	—	—	2	—	2
Net income	—	—	—	1,842	—	1,842
Other comprehensive income (loss)	—	—	—	—	76	76
Common stock issued, stock-based compensation plans	7	—	159	—	—	159
Stock-based compensation expense	—	—	217	—	—	217
Repurchases of common stock	(36)	(1)	(390)	(1,856)	—	(2,247)
Dividends declared, $0.80 per share	—	—	—	(451)	—	(451)
Balance, December 31, 2019	548	5	33	11,022	(38)	11,022
Cumulative effect of changes in accounting principle (2)	—	—	—	1	—	1
Net income	—	—	—	1,392	—	1,392
Other comprehensive income (loss)	—	—	—	—	148	148
Common stock issued, stock-based compensation plans	6	—	142	—	—	142
Stock-based compensation expense	—	—	232	—	—	232
Repurchases of common stock	(24)	—	(375)	(1,246)	—	(1,621)
Dividends declared, $0.88 per share	—	—	—	(480)	—	(480)
Balance, December 31, 2020	530	5	32	10,689	110	10,836
Net income	—	—	—	2,137	—	2,137
Other comprehensive income (loss)	—	—	—	—	(73)	(73)
Common stock issued, stock-based compensation plans	5	—	130	—	—	130
Stock-based compensation expense	—	—	246	—	—	246
Repurchases of common stock	(10)	—	(381)	(394)	—	(775)
Dividends declared, $0.96 per share	—	—	—	(510)	—	(510)
Balance, December 31, 2021	525	$ 5	$ 27	$ 11,922	$ 37	$ 11,991

(1) Reflects the adoption of the New Lease Standard on January 1, 2019.
(2) Reflects the adoption of the Credit Loss Standard on January 1, 2020.

The accompanying notes are an integral part of the consolidated financial statements.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
(in millions)	**2021**	**2020**	**2019**
Cash flows from operating activities:			
Net income	$ 2,137	$ 1,392	$ 1,842
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	574	559	526
Deferred income taxes	27	184	(306)
Stock-based compensation expense	246	232	217
Other	(1)	119	119
Changes in assets and liabilities:			
Trade accounts receivable	(407)	264	37
Other current and noncurrent assets	348	73	159
Accounts payable	(35)	109	8
Deferred revenue, current and noncurrent	19	65	56
Other current and noncurrent liabilities	(413)	302	(159)
Net cash provided by operating activities	2,495	3,299	2,499
Cash flows from investing activities:			
Purchases of property and equipment	(279)	(398)	(392)
Purchases of available-for-sale investment securities	(430)	—	(333)
Proceeds from maturity or sale of available-for-sale investment securities	120	—	2,107
Purchases of held-to-maturity investment securities	(203)	(202)	(693)
Proceeds from maturity of held-to-maturity investment securities	180	467	1,498
Purchases of other investments	(1,660)	(531)	(483)
Proceeds from maturity or sale of other investments	1,078	549	501
Payments for business combinations, net of cash acquired	(970)	(1,123)	(617)
Net cash (used in) provided by investing activities	(2,164)	(1,238)	1,588
Cash flows from financing activities:			
Issuance of common stock under stock-based compensation plans	130	142	159
Repurchases of common stock	(771)	(1,621)	(2,247)
Repayment of Term Loan borrowings and finance lease and earnout obligations	(53)	(50)	(28)
Proceeds from borrowing under the revolving credit facility	—	1,740	—
Repayment of notes outstanding under the revolving credit facility	—	(1,740)	—
Dividends paid	(509)	(480)	(453)
Net cash (used in) financing activities	(1,203)	(2,009)	(2,569)
Effect of exchange rate changes on cash and cash equivalents	(16)	(17)	(34)
(Decrease) increase in cash and cash equivalents	(888)	35	1,484
Cash and cash equivalents, beginning of year	2,680	2,645	1,161
Cash and cash equivalents, end of year	$ 1,792	$ 2,680	$ 2,645
Supplemental information:			
Cash paid for income taxes during the year	$ 625	$ 745	$ 870
Cash interest paid during the year	$ 7	$ 25	$ 25

The accompanying notes are an integral part of the consolidated financial statements.

COGNIZANT TECHNOLOGY SOLUTIONS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Dollars in millions, except share data)

Note 1 — Business Description and Summary of Significant Accounting Policies

The terms “Cognizant,” “we,” “our,” “us” and “the Company” refer to Cognizant Technology Solutions Corporation and its subsidiaries unless the context indicates otherwise.

Description of Business. We are one of the world’s leading professional services companies, engineering modern business for the digital era. Our services include digital services and solutions, consulting, application development, systems integration, application testing, application maintenance, infrastructure services and business process services. Digital services have become an increasingly important part of our portfolio, aligning with our clients' focus on becoming data-enabled, customer-centric and differentiated businesses. We are continuing to invest in digital services with a focus on four key areas: IoT, digital engineering, data and cloud. We tailor our services and solutions to specific industries with an integrated global delivery model that employs client service and delivery teams based at client locations and dedicated global and regional delivery centers. We help clients modernize technology, reimagine processes and transform experiences so they can stay ahead in a fast-changing world.

Basis of Presentation, Principles of Consolidation and Use of Estimates. The consolidated financial statements are presented in accordance with GAAP and reflect the consolidated financial position, results of operations, comprehensive income and cash flows of our consolidated subsidiaries for all periods presented. All intercompany balances and transactions have been eliminated in consolidation.

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amounts in the consolidated financial statements and accompanying disclosures. We evaluate our estimates on a continuous basis. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. The actual amounts may vary from the estimates used in the preparation of the accompanying consolidated financial statements.

Cash and Cash Equivalents and Investments. Cash and cash equivalents consist of all cash balances, including money market funds, certificates of deposits and commercial paper that have a maturity, at the date of purchase, of 90 days or less.

We determine the appropriate classification of our investments in marketable securities at the date of purchase and reevaluate such designation at each balance sheet date. We classify and account for our marketable debt securities as either available-for-sale or held-to-maturity. After consideration of our risk versus reward objectives, as well as our liquidity requirements, we may sell our available-for-sale securities prior to their stated maturities. We classify these marketable securities with maturities at the date of purchase beyond 90 days as short-term investments based on their highly liquid nature and because such marketable securities represent an investment of cash that is available for current operations. Available-for-sale securities are reported at fair value with changes in unrealized gains and losses recorded as a separate component of "Accumulated other comprehensive income (loss)" on the consolidated statements of financial position until realized. We determine the cost of the securities sold based on the specific identification method. Our held-to-maturity investment securities are financial instruments for which we have the intent and ability to hold to maturity and we classify these securities with maturities less than one year as short-term investments. Any held-to-maturity investment securities with maturities beyond one year from the balance sheet date are classified as long-term investments. Held-to-maturity securities are reported at amortized cost. Interest and amortization of premiums and discounts for debt securities are included in interest income.

For available-for-sale debt securities, if we do not intend to sell the security or it is not more likely than not that we will be required to sell the security before recovery of our amortized cost, we evaluate qualitative criteria, such as the financial health of and specific prospects for the issuer, to determine whether we do not expect to recover the amortized cost basis of the security. We also evaluate quantitative criteria including determining whether there has been an adverse change in expected future cash flows. If we do not expect to recover the entire amortized cost basis of the security, we consider the security to contain an expected credit loss, and we record the difference between the security’s amortized cost basis and its recoverable amount in earnings as an allowance for credit loss and the difference between the security’s recoverable amount and fair value in other comprehensive income. If we intend to sell the security or it is more likely than not we will be required to sell the security before recovery of its amortized cost basis, the security is considered impaired, and we recognize the entire difference between the security’s amortized cost basis and its fair value in earnings.

On initial recognition and on an ongoing basis, we evaluate our held-to-maturity investment securities for expected credit losses collectively when they share similar risk characteristics or individually, when the risk characteristics are different. The allowance for expected credit losses is determined using our historical loss experience. We monitor the credit ratings of the securities in our portfolio to evaluate the need for any changes to the allowance. An increase or a decrease in the allowance for expected credit losses is recorded through income as a credit loss expense or a reversal thereof. The allowance for expected credit losses is presented as a deduction from the amortized cost. A held-to-maturity investment security is written off when deemed uncollectible.

Financial Assets and Liabilities. Cash and certain cash equivalents, time deposits, trade receivables, accounts payable and other accrued liabilities are short-term in nature and, accordingly, their carrying values approximate fair value.

Property and Equipment. Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets. Leasehold improvements are amortized on a straight-line basis over the shorter of the term of the lease or the estimated useful life of the asset. Deposits paid towards acquisition of long-lived assets and the cost of assets not put in use by the balance sheet date are disclosed under the caption "Capital work-in-progress" in Note 6.

Leases. Our lease asset classes primarily consist of operating leases for office space, data centers and IT equipment. At inception of a contract, we determine whether a contract contains a lease, and if a lease is identified, whether it is an operating or finance lease. In determining whether a contract contains a lease we consider whether (1) we have the right to obtain substantially all of the economic benefits from the use of the asset throughout the term of the contract, (2) we have the right to direct how and for what purpose the asset is used throughout the term of the contract and (3) we have the right to operate the asset throughout the term of the contract without the lessor having the right to change the terms of the contract. Some of our lease agreements contain both lease and non-lease components that we account for as a single lease component for all of our lease asset classes.

Our ROU lease assets represent our right to use an underlying asset for the lease term and may include any advance lease payments made and any initial direct costs and exclude lease incentives. Our lease liabilities represent our obligation to make lease payments arising from the terms of the lease. ROU lease assets and lease liabilities are recognized at the commencement of the lease and are calculated using the present value of lease payments over the lease term. Typically, our lease agreements do not provide sufficient detail to determine the rate implicit in the lease. Therefore, we use our estimated country-specific incremental borrowing rate based on information available at the commencement date of the lease to calculate the present value of the lease payments. In estimating our country-specific incremental borrowing rates, we consider market rates of comparable collateralized borrowings for similar terms. Our lease terms may include the option to extend or terminate the lease before the end of the contractual lease term. Our ROU lease assets and lease liabilities include these options when it is reasonably certain that they will be exercised.

A portion of our real estate lease costs is subject to annual changes in the CPI. The changes to the CPI are treated as variable lease payments and are recognized in the period in which the obligation for those payments is incurred. Other variable lease costs primarily relate to adjustments for common area maintenance, utilities, property tax and lease concessions. These variable costs are recognized in the period in which the obligation is incurred.

We elect not to recognize ROU assets and lease liabilities for short-term leases with a term equal to or less than 12 months. We recognize the lease payments in our income statement on a straight-line basis over the lease term and variable lease payments in the period in which the obligation for those payments is incurred.

Both ROU assets and finance lease assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the related asset group may not be recoverable.

Internal Use Software. We capitalize certain costs that are incurred to purchase, develop and implement internal-use software during the application development phase, which primarily include coding, testing and certain data conversion activities. Capitalized costs are amortized on a straight-line basis over the useful life of the software. Costs incurred in performing planning and post-implementation activities are expensed as incurred.

Cloud Computing Arrangements. We defer certain implementation costs that are incurred when implementing cloud computing service or SaaS arrangements, which primarily include efforts associated with configuration and development activities. Once the service is ready for use, deferred costs are expensed over the term of the arrangement and recognized in income from operations.

Software to be Sold, Leased or Marketed. We capitalize costs incurred after technological feasibility is reached but before software is available for general release to clients, which primarily include coding and testing activities. Once the product is ready for general release, capitalized costs are amortized over the useful life of the software.

Business Combinations. We account for business combinations using the acquisition method, which requires the identification of the acquirer, the determination of the acquisition date and the allocation of the purchase price paid by the acquirer to the identifiable tangible and intangible assets acquired, the liabilities assumed, including any contingent consideration and any noncontrolling interest in the acquiree at their acquisition date fair values. Goodwill represents the excess of the purchase price over the fair value of net assets acquired, including the amount assigned to identifiable intangible assets. Identifiable intangible assets with finite lives are amortized over their expected useful lives. Acquisition-related costs are expensed in the periods in which the costs are incurred. The results of operations of acquired businesses are included in our consolidated financial statements from the acquisition date.

Equity Method Investments. Equity investments that give us the ability to exercise significant influence, but not control, over an investee are accounted for using the equity method of accounting and recorded in the caption "Long-term investments" on our consolidated statements of financial position. Equity method investments are initially recorded at cost. We periodically review the carrying value of our equity method investments to determine if there has been an other-than-temporary decline in the carrying value. The investment balance is increased to reflect contributions and our share of earnings and decreased to reflect our share of losses, distributions, and other-than-temporary impairments. Our proportionate share of the net income or loss of the investee is recorded in the caption "Income (loss) from equity method investments" on our consolidated statements of operations.

Long-lived Assets and Finite-lived Intangible Assets. We review long-lived assets and certain finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset group may not be recoverable. The carrying amount may not be recoverable when the sum of undiscounted expected future cash flows is less than the carrying amount of such asset groups. The impairment loss is determined as the amount by which the carrying amount of the asset group exceeds its fair value. Intangible assets consist primarily of customer relationships and developed technology, which are being amortized on a straight-line basis over their estimated useful lives.

Goodwill and Indefinite-lived Intangible Assets. We evaluate goodwill and indefinite-lived intangible assets for impairment at least annually, or as circumstances warrant. Goodwill is evaluated at the reporting unit level by comparing the fair value of the reporting unit with its carrying amount including goodwill. An impairment of goodwill exists if the carrying amount of the reporting unit exceeds its fair value. The impairment loss is the amount by which the carrying amount exceeds the reporting unit's fair value, limited to the total amount of goodwill allocated to that reporting unit. For indefinite-lived intangible assets, if our qualitative assessment indicates that it is more-likely-than-not that an indefinite-lived intangible asset is impaired, we test the assets for impairment by comparing the fair value of such assets to their carrying value. If an impairment is indicated, a write down to the fair value of indefinite-lived intangible asset is recorded.

Stock Repurchase Program. Under the Board of Directors authorized stock repurchase program, the Company is authorized to repurchase its Class A common stock through open market purchases, including under a 10b5-1 Plan, or in private transactions, including through ASR agreements entered into with financial institutions, in accordance with applicable federal securities laws. We account for the repurchased shares as constructively retired. Shares are returned to the status of authorized and unissued shares at the time of repurchase or in the periods they are delivered if repurchased under an ASR. To reflect share repurchases in the consolidated statements of financial position, we (1) reduce common stock for the par value of the shares, (2) reduce additional paid-in capital for the amount in excess of par during the period in which the shares are repurchased and (3) record any residual amount in excess of available additional paid-in capital to retained earnings. Upfront payments related to ASRs are accounted for as a reduction to stockholders' equity in the consolidated statements of financial position in the period the payments are made.

Revenue Recognition. We recognize revenues as we transfer control of deliverables (products, solutions and services) to our clients in an amount reflecting the consideration to which we expect to be entitled. To recognize revenues, we apply the following five step approach: (1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations in the contract, and (5) recognize revenues when a performance obligation is satisfied. We account for a contract when it has approval and commitment from all parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. We apply judgment in determining the customer's ability and intention to pay based on a variety of factors including the customer's historical payment experience.

For performance obligations where control is transferred over time, revenues are recognized based on the extent of progress towards completion of the performance obligation. The selection of the method to measure progress towards completion requires judgment and is based on the nature of the deliverables to be provided.

Revenues related to fixed-price contracts for application development and systems integration services, consulting or other technology services are recognized as the service is performed using the cost to cost method, under which the total value of revenues is recognized on the basis of the percentage that each contract's total labor cost to date bears to the total expected labor costs. Revenues related to fixed-price application maintenance, testing and business process services are recognized based on our right to invoice for services performed for contracts in which the invoicing is representative of the value being delivered. If our invoicing is not consistent with the value delivered, revenues are recognized as the service is performed based on the cost to cost method described above. The cost to cost method requires estimation of future costs, which is updated as the project progresses to reflect the latest available information; such estimates and changes in estimates involve the use of judgment. The cumulative impact of any revision in estimates is reflected in the financial reporting period in which the change in estimate becomes known and any anticipated losses on contracts are recognized immediately, where appropriate.

Revenues related to fixed-price hosting and infrastructure services are recognized based on our right to invoice for services performed for contracts in which the invoicing is representative of the value being delivered. If our invoicing is not consistent with the value delivered, revenues are recognized on a straight-line basis unless revenues are earned and obligations are fulfilled in a different pattern. The revenue recognition method applied to the types of contracts described above provides the most faithful depiction of performance towards satisfaction of our performance obligations; for example, the cost to cost method is used when the value of services provided to the customer is best represented by the costs expended to deliver those services.

Revenues related to our time-and-materials, transaction-based or volume-based contracts are recognized over the period the services are provided either using an output method such as labor hours, or a method that is otherwise consistent with the way in which value is delivered to the customer.

Revenues related to our non-hosted software license arrangements that do not require significant modification or customization of the underlying software are recognized when the software is delivered as control is transferred at a point in time. For software license arrangements that require significant functionality enhancements or modification of the software, revenues for the software license and related services are recognized as the services are performed in accordance with the methods applicable to application development and systems integration services described above. In software hosting arrangements, the rights provided to the customer, such as ownership of a license, contract termination provisions and the feasibility of the client to operate the software, are considered in determining whether the arrangement includes a license or a service. Sales and usage-based fees promised in exchange for licenses of intellectual property are not recognized as revenue until the uncertainty related to the variable amounts is resolved. Revenues related to software maintenance and support are generally recognized on a straight-line basis over the contract period.

Incentive revenues, volume discounts, or any other form of variable consideration is estimated using either the sum of probability weighted amounts in a range of possible consideration amounts (expected value) or the single most likely amount in a range of possible consideration amounts (most likely amount), depending on which method better predicts the amount of consideration to which we may be entitled. We include in the transaction price variable consideration only to the extent it is probable that a significant reversal of revenues recognized will not occur when the uncertainty associated with the variable consideration is resolved. Our estimates of variable consideration and determination of whether and when to include estimated amounts in the transaction price may involve judgment and are based largely on an assessment of our anticipated performance and all information that is reasonably available to us.

Revenues also include the reimbursement of out-of-pocket expenses. Our warranties generally provide a customer with assurance that the related deliverable will function as the parties intended because it complies with agreed-upon specifications and are therefore not considered an additional performance obligation in the contract.

We may enter into arrangements that consist of multiple performance obligations. Such arrangements may include any combination of our deliverables. To the extent a contract includes multiple promised deliverables, we apply judgment to determine whether promised deliverables are capable of being distinct and are distinct in the context of the contract. If these criteria are not met, the promised deliverables are accounted for as a combined performance obligation. For arrangements with multiple distinct performance obligations, we allocate consideration among the performance obligations based on their relative standalone selling price. Standalone selling price is the price at which we would sell a promised good or service separately to the customer. When not directly observable, we typically estimate standalone selling price by using the expected cost plus a margin approach. We typically establish a standalone selling price range for our deliverables, which is reassessed on a periodic basis or when facts and circumstances change.

We assess the timing of the transfer of goods or services to the customer as compared to the timing of payments to determine whether a significant financing component exists. As a practical expedient, we do not assess the existence of a significant financing component when the difference between payment and transfer of deliverables is a year or less. If the difference in timing arises for reasons other than the provision of finance to either the customer or us, no financing component is deemed to exist. The primary purpose of our invoicing terms is to provide customers with simplified and predictable ways of purchasing our services, not to receive or provide financing from or to customers. We do not consider set up or transition fees paid upfront by our customers to represent a financing component, as such fees are required to encourage customer commitment to the project and protect us from early termination of the contract.

Our contracts may be modified to add, remove or change existing performance obligations. The accounting for modifications to our contracts involves assessing whether the services added to an existing contract are distinct and whether the pricing is at the standalone selling price. Services added that are not distinct are accounted for on a cumulative catch up basis, while those that are distinct are accounted for prospectively, either as a separate contract if the additional services are priced at the standalone selling price, or as a termination of the existing contract and creation of a new contract if not priced at the standalone selling price. Services added to our application development and systems integration service contracts are typically not distinct, while services added to our other contracts, including application maintenance, testing and business process services contracts, are typically distinct.

From time to time, we may enter into arrangements with third party suppliers to resell products or services. In such cases, we evaluate whether we are the principal (i.e., report revenues on a gross basis) or agent (i.e., report revenues on a net basis). In doing so, we evaluate whether we control the good or service before it is transferred to the customer. If we control the good or service before it is transferred to the customer, we are the principal; if not, we are the agent. Determining whether we control the good or service before it is transferred to the customer may require judgment.

Trade Accounts Receivable, Contract Assets and Contract Liabilities. We classify our right to consideration in exchange for deliverables as either a receivable or a contract asset. A receivable is a right to consideration that is unconditional (i.e., only the passage of time is required before payment is due). For example, we recognize a receivable for revenues related to our time and materials and transaction or volume-based contracts when earned regardless of whether amounts have been billed. We present such receivables in "Trade accounts receivable, net" in our consolidated statements of financial position at their net estimated realizable value. A contract asset is a right to consideration that is conditional upon factors other than the passage of time. Contract assets are presented in "Other current assets" in our consolidated statements of financial position and primarily relate to unbilled amounts on fixed-price contracts utilizing the cost to cost method of revenue recognition. Our contract liabilities, or deferred revenue, consist of advance payments from clients and billings in excess of revenues recognized. We classify deferred revenue as current or noncurrent based on the timing of when we expect to recognize the revenues.

Our contract assets and contract liabilities are reported on a net basis by contract at the end of each reporting period. The difference between the opening and closing balances of our contract assets and contract liabilities primarily results from the timing difference between our performance obligations and the client's payment. We receive payments from clients based on the terms established in our contracts, which vary by contract type.

Allowance for Credit Losses. We calculate expected credit losses for our trade accounts receivable and contract assets. Expected credit losses include losses expected based on known credit issues with specific customers as well as a general expected credit loss allowance based on relevant information, including historical loss rates, current conditions, and reasonable economic forecasts that affect collectibility. We update our allowance for credit losses on a quarterly basis with changes in the allowance recognized in income from operations.

Costs to Fulfill. Recurring operating costs for contracts with customers are recognized as incurred. Certain eligible, nonrecurring costs (i.e., set-up or transition costs) are capitalized when such costs (1) relate directly to the contract, (2) generate or enhance resources of the Company that will be used in satisfying the performance obligation in the future, and (3) are expected to be recovered. These costs are expensed ratably over the estimated life of the customer relationship, including expected contract renewals. In determining the estimated life of the customer relationship, we evaluate the average contract term, on a portfolio basis by nature of the services to be provided, and apply judgment in evaluating the rate of technological and industry change. Capitalized amounts are monitored regularly for impairment. Impairment losses are recorded when projected remaining undiscounted operating cash flows are not sufficient to recover the carrying amount of the capitalized costs to fulfill.

Stock-Based Compensation. Stock-based compensation expense for awards of equity instruments to employees and non-employee directors is determined based on the grant date fair value of those awards. We recognize these compensation costs net of an estimated forfeiture rate over the requisite service period of the award. Forfeitures are estimated on the date of grant and revised if actual or expected forfeiture activity differs materially from original estimates. Stock-based compensation costs for PSUs are recognized on a graded-vesting basis over the vesting period based on the most probable outcome of the performance conditions. If the minimum performance targets are not met, no compensation cost is recognized and any recognized compensation cost is reversed, except for awards subject to a market condition. The fair value of RSUs and PSUs is determined based on the number of stock units granted and the quoted price of our stock at the date of grant. The fair value of PSUs granted subject to a market condition is determined using a Monte Carlo valuation model.

Foreign Currency. The assets and liabilities of our foreign subsidiaries whose functional currency is not the U.S. dollar are translated into U.S. dollars at current exchange rates while revenues and expenses are translated at average monthly exchange rates. The resulting translation adjustments are recorded in the caption "Accumulated other comprehensive income (loss)" on the consolidated statements of financial position.

Foreign currency transactions and balances are those that are denominated in a currency other than the entity’s functional currency. An entity's functional currency is the currency of the primary economic environment in which it operates. The U.S. dollar is the functional currency for some of our foreign subsidiaries. For these subsidiaries, transactions and balances denominated in the local currency are foreign currency transactions. Foreign currency transactions and balances related to non-monetary assets and liabilities are remeasured to the functional currency of the entity at historical exchange rates while monetary assets and liabilities are remeasured to the functional currency of the entity at current exchange rates. Foreign currency exchange gains or losses from remeasurement are included in the caption "Foreign currency exchange gain (losses), net" on our consolidated statements of operations together with gains or losses on our undesignated foreign currency hedges.

Derivative Financial Instruments. Derivative financial instruments are recorded on our consolidated statements of financial position as either an asset or liability measured at its fair value as of the reporting date. Our derivative financial instruments consist primarily of foreign exchange forward and option contracts. For derivative financial instruments to qualify for hedge accounting, the following criteria must be met: (1) the hedging instrument must be designated as a hedge; (2) the hedged exposure must be specifically identifiable and must expose us to risk; and (3) it must be expected that a change in fair value of the hedging instrument and an opposite change in the fair value of the hedged exposure will have a high degree of correlation. Changes in our derivatives’ fair values are recognized in net income unless specific hedge accounting and documentation criteria are met (i.e., the instruments are designated and accounted for as hedges). We record the effective portion of the unrealized gains and losses on our derivative financial instruments that are designated as cash flow hedges in the caption "Accumulated other comprehensive income (loss)" in the consolidated statements of financial position. Any ineffectiveness or excluded portion of a designated cash flow hedge is recognized in net income. Upon occurrence of the hedged transaction, the gains and losses on the derivative are recognized in net income.

Income Taxes. We provide for income taxes utilizing the asset and liability method of accounting. Under this method, deferred income taxes are recorded to reflect the tax consequences in future years of differences between the tax basis of assets and liabilities and their financial reporting amounts at each balance sheet date, based on enacted tax laws and statutory tax rates applicable to the periods in which the differences are expected to affect taxable income. If it is determined that it is more likely than not that future tax benefits associated with a deferred income tax asset will not be realized, a valuation allowance is provided. The effect of a change in tax rates on deferred income tax assets and liabilities is recognized in the provision for income taxes in the period that includes the enactment date.

Our provision for income taxes also includes the impact of provisions established for uncertain income tax positions, as well as any related penalties and interest. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit. To the extent that the final outcome of these matters differs from the amounts recorded, such differences will impact the provision for income taxes in the period in which such determination is made.

Earnings Per Share. Basic EPS is computed by dividing earnings available to common stockholders by the weighted-average number of common shares outstanding for the period. Diluted EPS includes all potential dilutive common stock in the weighted average shares outstanding. We exclude from the calculation of diluted EPS options with exercise prices that are greater than the average market price and shares related to stock-based awards whose combined exercise price and unamortized fair value were greater in each of those periods than the average market price of our common stock for the period, because their effect would be anti-dilutive. We excluded less than 1 million of anti-dilutive shares in each of 2021, 2020 and 2019 from our diluted EPS calculation. We include PSUs in the dilutive common shares when they become contingently issuable per the authoritative guidance and exclude them when they are not contingently issuable.

Recently Adopted Accounting Pronouncements

Date Issued and Topic	Date Adopted and Method	Description	Impact
February 2016 Leases	January 1, 2019 Effective Date Method	The new standard replaces the existing guidance on leases and requires the lessee to recognize a ROU asset and a lease liability for all leases with lease terms greater than twelve months. For finance leases, the lessee recognizes interest expense and amortization of the ROU asset, and for operating leases, the lessee recognizes total lease expense on a straight-line basis.	As a result of the adoption, we recorded an increase to opening retained earnings of $2 million.
June 2016 Financial Instruments-Credit Losses	January 1, 2020 Modified Retrospective	The new standard requires the measurement and recognition of expected credit losses using the current expected credit loss model for financial assets held at amortized cost, which includes the Company's trade accounts receivable, certain financial instruments and contract assets. It replaces the existing incurred loss impairment model with an expected loss methodology. The recorded credit losses are adjusted each period for changes in expected lifetime credit losses. The standard requires a cumulative effect adjustment to the statement of financial position as of the beginning of the first reporting period in which the guidance is effective.	As a result of the adoption, we recorded an increase to our opening retained earnings and "Trade accounts receivable, net" of $1 million each. Prior year amounts are not adjusted and continue to be reported in accordance with our historical accounting policies.

Note 2 — Revenues

Disaggregation of Revenues

The tables below present disaggregated revenues from contracts with clients by client location, service line and contract-type for each of our business segments. We believe this disaggregation best depicts how the nature, amount, timing and uncertainty of our revenues and cash flows are affected by industry, market and other economic factors. Our consulting and technology services include consulting, application development, systems integration, and application testing services as well as software solutions and related services while our outsourcing services include application maintenance, infrastructure and business process services. Revenues are attributed to geographic regions based upon client location, which is the client's billing address. Substantially all revenues in our North America region relate to clients in the United States.

(in millions)	FS	HC	P&R (Year Ended December 31, 2021)	CMT	Total
Revenues					
Geography:					
North America	$ 4,204	$ 4,571	$ 2,937	$ 1,924	$ 13,636
United Kingdom	547	168	471	456	1,642
Continental Europe	745	477	539	158	1,919
Europe - Total	1,292	645	1,010	614	3,561
Rest of World	555	121	329	305	1,310
Total	$ 6,051	$ 5,337	$ 4,276	$ 2,843	$ 18,507
Service line:					
Consulting and technology services	$ 4,079	$ 3,090	$ 2,725	$ 1,693	$ 11,587
Outsourcing services	1,972	2,247	1,551	1,150	6,920
Total	$ 6,051	$ 5,337	$ 4,276	$ 2,843	$ 18,507
Type of contract:					
Time and materials	$ 3,613	$ 2,063	$ 1,785	$ 1,679	$ 9,140
Fixed-price	2,063	2,157	2,085	1,032	7,337
Transaction or volume-based	375	1,117	406	132	2,030
Total	$ 6,051	$ 5,337	$ 4,276	$ 2,843	$ 18,507

(in millions)	FS	HC	P&R (Year Ended December 31, 2020)	CMT	Total
Revenues					
Geography:					
North America	$ 4,013	$ 4,181	$ 2,650	$ 1,737	$ 12,581
United Kingdom	463	157	371	344	1,335
Continental Europe	629	434	413	177	1,653
Europe - Total	1,092	591	784	521	2,988
Rest of World	516	80	262	225	1,083
Total	$ 5,621	$ 4,852	$ 3,696	$ 2,483	$ 16,652
Service line:					
Consulting and technology services	$ 3,691	$ 2,786	$ 2,249	$ 1,456	$ 10,182
Outsourcing services	1,930	2,066	1,447	1,027	6,470
Total	$ 5,621	$ 4,852	$ 3,696	$ 2,483	$ 16,652
Type of contract:					
Time and materials	$ 3,548	$ 1,950	$ 1,548	$ 1,515	$ 8,561
Fixed-price	1,736	1,777	1,741	871	6,125
Transaction or volume-based	337	1,125	407	97	1,966
Total	$ 5,621	$ 4,852	$ 3,696	$ 2,483	$ 16,652

(in millions)	FS	HC	P&R	CMT	Total
			Year Ended December 31, 2019		
Revenues					
Geography:					
North America	$ 4,137	$ 4,147	$ 2,678	$ 1,764	$ 12,726
United Kingdom	484	130	380	319	1,313
Continental Europe	728	341	453	169	1,691
Europe - Total	1,212	471	833	488	3,004
Rest of World	520	77	259	197	1,053
Total	$ 5,869	$ 4,695	$ 3,770	$ 2,449	$ 16,783
Service line:					
Consulting and technology services	$ 3,782	$ 2,564	$ 2,295	$ 1,305	$ 9,946
Outsourcing services	2,087	2,131	1,475	1,144	6,837
Total	$ 5,869	$ 4,695	$ 3,770	$ 2,449	$ 16,783
Type of contract:					
Time and materials	$ 3,651	$ 1,845	$ 1,632	$ 1,528	$ 8,656
Fixed-price	1,922	1,635	1,730	803	6,090
Transaction or volume-based	296	1,215	408	118	2,037
Total	$ 5,869	$ 4,695	$ 3,770	$ 2,449	$ 16,783

During the fourth quarter of 2021, we reached a settlement agreement with the final customer involved in our previously disclosed proposed exit from a large customer engagement of our Samlink subsidiary and additionally entered into an agreement to sell this subsidiary. We reached settlement agreements with the other two customers to this engagement in the second quarter of 2021. The financial terms of the final settlement agreements with the three customers did not materially differ from our original 2020 offer and, accordingly, the impact to our 2021 consolidated statement of operations was immaterial. In 2020, in connection with our settlement offer, we recorded a reduction of revenues of $118 million and additional expenses of $33 million, primarily related to the impairment of long-lived assets. The sale of our Samlink subsidiary closed on February 1, 2022.

Costs to Fulfill

The following table presents information related to the capitalized costs to fulfill, such as setup or transition activities. Costs to fulfill are recorded in "Other noncurrent assets" in our consolidated statements of financial position and the amortization expense of costs to fulfill is included in "Cost of revenues" in our consolidated statements of operations. Costs to obtain contracts were immaterial for the period disclosed.

(in millions)	2021	2020
Beginning balance	$ 467	$ 485
Costs capitalized	56	98
Amortization expense	(118)	(102)
Impairment charge	(11)	(14)
Ending balance	$ 394	$ 467

Contract Balances

A contract asset is a right to consideration that is conditional upon factors other than the passage of time. Contract assets are presented in "Other current assets" in our consolidated statements of financial position and primarily relate to unbilled amounts on fixed-price contracts utilizing the cost to cost method of revenue recognition. The table below shows significant movements in contract assets:

(in millions)	2021	2020
Beginning balance	$ 315	$ 334
Revenues recognized during the period but not billed	275	289
Amounts reclassified to trade accounts receivable	(280)	(308)
Ending balance	$ 310	$ 315

Our contract liabilities, or deferred revenue, consist of advance payments and billings in excess of revenues recognized. The table below shows significant movements in the deferred revenue balances (current and noncurrent):

(in millions)	2021	2020
Beginning balance	$ 419	$ 336
Amounts billed but not recognized as revenues	413	368
Revenues recognized related to the beginning balance of deferred revenue	(389)	(285)
Ending balance	$ 443	$ 419

Revenues recognized during the year ended December 31, 2021 for performance obligations satisfied or partially satisfied in previous periods were immaterial.

Remaining Performance Obligations

As of December 31, 2021, the aggregate amount of transaction price allocated to remaining performance obligations, was $1,586 million, of which approximately 80% is expected to be recognized as revenues within 2 years. Disclosure is not required for performance obligations that meet any of the following criteria:

(1) contracts with a duration of one year or less as determined under ASC Topic 606 "Revenue from Contracts with Customers",

(2) contracts for which we recognize revenues based on the right to invoice for services performed,

(3) variable consideration allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation in accordance with ASC 606-10-25-14(b), for which the criteria in ASC 606-10-32-40 have been met, or

(4) variable consideration in the form of a sales-based or usage based royalty promised in exchange for a license of intellectual property.

Many of our performance obligations meet one or more of these exemptions and therefore are not included in the remaining performance obligation amount disclosed above.

Trade Accounts Receivable and Allowance for Credit Losses

We calculate expected credit losses for our trade accounts receivable based on historical credit loss rates for each aging category as adjusted for the current market conditions and forecasts about future economic conditions. The following table presents the activity in the allowance for credit losses for the trade accounts receivable:

(in millions)	2021	2020	2019
Beginning balance	$ 57	$ 67	$ 78
Impact of adoption of the Credit Loss Standard	—	(1)	—
Credit loss expense	6	8	(11)
Write-offs charged against the allowance	(13)	(17)	—
Ending balance	$ 50	$ 57	$ 67

Note 3 — Business Combinations

Acquisitions completed during each of the three years ended December 31, 2021, 2020 and 2019 were not individually or in the aggregate material to our operations. Accordingly, pro forma results have not been presented. We have allocated the purchase price related to these transactions to tangible and intangible assets acquired and liabilities assumed, including goodwill, based on their estimated fair values. The primary items that generated goodwill are the value of the acquired assembled workforces and synergies between the acquired companies and us, neither of which qualify as an identifiable intangible asset.

2021

In 2021, we acquired 100% ownership in each of the following:

- Linium, a cloud transformation consultancy group specializing in the ServiceNow platform and solutions for smart digital enterprise workflows, acquired to broaden our enterprise service management capabilities (acquired January 31, 2021);
- Magenic, a provider of agile software and cloud development, DevOps, experience design and advisory services across a range of industries, acquired to enhance our global software engineering expertise (acquired February 1, 2021);
- Servian, an Australia-based enterprise transformation consultancy specializing in data analytics, AI, digital services, experience design and cloud, acquired to enhance our digital portfolio and market presence in Australia and New Zealand (acquired April 1, 2021);
- ESG Mobility, a digital automotive engineering research and development provider for connected, autonomous and electric vehicles, acquired to expand our digital engineering expertise, particularly in connected vehicles (acquired June 1, 2021);
- TQS, a global industrial data and intelligence company, acquired to accelerate our growth in IoT, data and analytics (acquired July 30, 2021).
- Hunter, a provider of digital engineering and project management services, acquired to extend our talent network in key markets, expanding our digital engineering resources in the United States (acquired August 16, 2021); and
- Devbridge, a software consultancy and product development company, acquired to expand our software product engineering capabilities and global delivery footprint (acquired December 9, 2021).

The allocations of preliminary purchase price to the fair value of the assets acquired and liabilities assumed were as follows:

(dollars in millions)	Devbridge	Servian	Magenic	ESG Mobility	Linium	Other	Total	Weighted Average Useful Life
Cash	$ 7	$ 4	$ 13	$ 28	$ —	$ 2	$ 54	
Trade accounts receivable	12	15	17	30	5	12	91	
Property and equipment and other assets	5	6	4	8	1	4	28	
Operating lease assets, net	11	5	10	27	—	1	54	
Non-deductible goodwill	41	184	10	26	—	18	279	
Tax-deductible goodwill	140	—	137	24	57	10	368	
Customer relationship assets	72	77	90	77	24	32	372	9.8 years
Other intangible assets	—	2	1	—	—	—	3	3.8 years
Current liabilities	(11)	(12)	(29)	(22)	(2)	(7)	(83)	
Noncurrent liabilities	(9)	(29)	(7)	(66)	—	(6)	(117)	
Purchase price, inclusive of contingent consideration	$ 268	$ 252	$ 246	$ 132	$ 85	$ 66	$ 1,049	

For the year ended December 31, 2021, revenues from acquisitions completed in 2021, since the dates of acquisition, were $301 million. For acquisitions completed in 2021, the allocation of purchase price is preliminary and will be finalized as soon as practicable within the measurement period, but in no event later than one year following the date of acquisition.

2020

In 2020, we acquired 100% ownership in each of the following:

- Code Zero, a provider of consulting and implementation services acquired to strengthen our cloud solutions portfolio and Salesforce Configure-Price-Quote and billing capabilities (acquired on January 31, 2020);
- Lev, a Salesforce Platinum Partner specializing in digital marketing consultancy and implementation of custom cloud solutions acquired to expand our global Salesforce practice (acquired on March 27, 2020);
- EI-Technologies, a digital technology consulting firm and leading Salesforce specialist acquired to expand our global Salesforce practice (acquired on May 29, 2020);
- Collaborative Solutions, a provider of Workday enterprise cloud applications for finance and human resources acquired to strengthen our portfolio of cloud offerings (acquired on June 10, 2020);
- New Signature, an independent Microsoft public cloud transformation company acquired to expand our hyperscale cloud advisory services and provide the foundation for our dedicated practice centered on Microsoft cloud solutions (acquired on August 18, 2020);
- the net assets of Tin Roof, a custom software and digital product development services company acquired to expand our software product engineering footprint in the United States (acquired on September 16, 2020);
- 10th Magnitude, a leading cloud specialist focused on the Microsoft Azure cloud computing platform acquired to expand our Microsoft Azure expertise (acquired on September 30, 2020);
- the net assets of Bright Wolf, a technology service provider specializing in customer Industrial IoT solutions acquired to expand our smart products offering and expertise in architecting and implementing Industrial IoT solutions (acquired on November 2, 2020); and
- Inawisdom, an Amazon Web Services consulting partner with expertise in AI, machine learning, and data analytics acquired to expand our client services in Europe and strengthen our end-to-end cloud-native AI and machine learning solutions portfolio (acquired on December 18, 2020).

The allocations of purchase price to the fair value of the assets acquired and liabilities assumed were as follows:

(dollars in millions)	Collaborative Solutions	New Signature	Tin Roof	10th Magnitude	Others	Total	Weighted Average Useful Life
Cash	$ 10	$ 13	$ —	$ 2	$ 10	$ 35	
Trade accounts receivable	38	13	10	7	21	89	
Property and equipment and other assets	6	6	1	2	15	30	
Operating lease assets, net	6	7	2	4	13	32	
Non-deductible goodwill	44	292	—	90	66	492	
Deductible goodwill	281	—	86	39	92	498	
Customer relationship intangible assets	37	8	69	10	21	145	9.8 years
Other intangible assets	8	1	—	—	2	11	5.4 years
Current liabilities	(25)	(20)	(13)	(15)	(23)	(96)	
Noncurrent liabilities	(5)	(8)	(2)	(5)	(15)	(35)	
Purchase price, inclusive of contingent consideration (1)	$ 400	$ 312	$ 153	$ 134	$ 202	$ 1,201	

(1) The purchase price for our acquisitions includes contingent consideration components with a collective maximum payout of $59 million, valued at $42 million at the date of acquisition, which is contingent upon achieving certain performance thresholds during the first two calendar years following the date of acquisition.

For the year ended December 31, 2020, revenues from acquisitions completed in 2020, since the dates of acquisition, were $222 million.

Note 4 — Restructuring Charges

During 2020 and 2019, we incurred costs related to both our realignment program and our 2020 Fit for Growth Plan. Our realignment program, which began in 2017, improved our client focus, cost structure and the efficiency and effectiveness of our delivery while continuing to drive revenue growth. Our 2020 Fit for Growth Plan, which began in the fourth quarter of 2019, simplified our organizational model and optimized our cost structure in order to partially fund the investments required to execute on our strategy and advance our growth agenda and included our decision to exit certain content-related services that were not in line with our strategic vision for the Company. The total costs related to our realignment program and our 2020 Fit for Growth Plan are reported in "Restructuring charges" in our consolidated statements of operations. We do not allocate these charges to individual segments in internal management reports used by the chief operating decision maker. Accordingly, such expenses are included in our segment reporting as “unallocated costs”. See Note 18.

During 2020 we incurred $42 million of certain employee retention costs and professional fees related to our realignment program and $173 million of employee separation, employee retention and facility exit costs and other charges related to our 2020 Fit for Growth Plan. During 2019, we incurred $169 million of employee separation costs, certain employee retention costs, professional fees and Executive Transition Costs related to our realignment program and $48 million of employee separation, employee retention and facility exit costs and other charges related to our 2020 Fit for Growth Plan. We did not incur any costs related to these plans during 2021.

Note 5 — Investments

Our investments were as follows as of December 31:

(in millions)	2021	2020
Short-term investments:		
Equity investment security	$ 26	$ 27
Available-for-sale investment securities	310	—
Held-to-maturity investment securities	37	14
Time deposits	554	3
Total short-term investments	$ 927	$ 44
Long-term investments:		
Other investments	$ 66	$ 35
Restricted time deposits (1)	397	405
Total long-term investments	$ 463	$ 440

(1) See Note 11.

Equity Investment Security

Our equity investment security is a U.S. dollar denominated investment in a fixed income mutual fund. Realized and unrealized gains and losses were immaterial for the years ended December 31, 2021, 2020 and 2019.

Available-for-Sale Investment Securities

Our available-for-sale investment securities consist of highly rated U.S. dollar denominated investments in commercial paper maturing within one year. As of December 31, 2021, the amortized cost and fair value of our available-for-sale investments were $310 million. Unrealized gains and losses were immaterial as of December 31, 2021.

Proceeds from sales of available-for-sale investment securities and the gross gains and losses that have been included in earnings as a result of those sales were as follows:

(in millions)	2021	2020	2019
Proceeds from sales of available-for-sale investment securities	$ —	$ —	$ 1,712
Gross gains	$ —	$ —	$ 6
Gross losses	—	—	(5)
Net realized gains on sales of available-for-sale investment securities	$ —	$ —	$ 1

Held-to-Maturity Investment Securities

Our held-to-maturity investment securities consist of Indian rupee denominated investments primarily in commercial paper and international corporate bonds. Our investment guidelines are to purchase securities that are investment grade at the time of acquisition. The basis for the measurement of fair value of our held-to-maturity investments is Level 2 in the fair value hierarchy.

The amortized cost and fair value of held-to-maturity investment securities were as follows as of December 31:

	2021		2020	
(in millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Short-term investments, due within one year:				
Corporate and other debt securities	$ 17	$ 17	$ 14	$ 14
Commercial paper	20	20	—	—
Total held-to-maturity investments	$ 37	$ 37	$ 14	$ 14

As of December 31, 2021, corporate and other debt securities in the amount of $17 million and commercial paper in the amount of $10 million were in an unrealized loss position. The total unrealized loss was less than $1 million and none of the securities had been in an unrealized loss position for longer than 12 months. As of December 31, 2020, there were no held-to-maturity investment securities in an unrealized loss position.

The securities in our portfolio are highly rated and short-term in nature. As of December 31, 2021, our corporate and other debt securities were rated AA+ or better and our commercial paper securities were rated A-1+ by CRISIL, an Indian subsidiary of S&P Global.

Other Investments

As of December 31, 2021 and 2020, we had equity method investments of $63 million and $31 million, respectively, primarily related to an investment in the technology sector. As of December 31, 2021 and 2020, we had equity securities without a readily determinable fair value of $3 million and $4 million, respectively.

During 2019, as a result of events indicating one of our equity method investments, valued at $66 million as of December 31, 2018, experienced an other-than-temporary impairment, we assessed its fair value and determined that the carrying value exceeded the fair value. As such, we recorded an impairment charge of $57 million in the fourth quarter of 2019 within the caption "Income (loss) from equity method investments" in our consolidated statement of operations. In determining the fair value of the equity method investment, we considered results from the following valuation methodologies: income approach, based on discounted future cash flows, market approach, based on current market multiples and net asset value approach, based on the assets and liabilities of the investee.

Note 6 — Property and Equipment, net

Property and equipment were as follows as of December 31:

	Estimated Useful Life	2021	2020
	(in years)	(in millions)	
Buildings	30	$ 777	$ 783
Computer equipment	3 – 5	638	636
Computer software	3 – 8	926	840
Furniture and equipment	5 – 9	772	761
Land		7	7
Capital work-in-progress		116	122
Leasehold improvements	Shorter of the lease term or the life of the asset	431	424
Sub-total		3,667	3,573
Accumulated depreciation and amortization		(2,496)	(2,322)
Property and equipment, net		$ 1,171	$ 1,251

Depreciation and amortization expense related to property and equipment was $392 million, $407 million and $363 million for the years ended December 31, 2021, 2020 and 2019, respectively.

The gross amount of property and equipment recorded under finance leases was $24 million and $37 million as of December 31, 2021 and 2020, respectively. Accumulated amortization for our ROU finance lease assets was $17 million and $23 million as of December 31, 2021 and 2020, respectively. Amortization expense related to our ROU finance lease assets was $7 million, $7 million, and $11 million for the years ended December 31, 2021, 2020, and 2019 respectively.

The gross amount of property and equipment recorded for software to be sold, leased or marketed reported in the caption "Computer software" above was $201 million and $159 million as of December 31, 2021 and 2020, respectively. Accumulated amortization for software to be sold, leased or marketed was $106 million and $73 million as of December 31, 2021 and 2020, respectively. Amortization expense for software to be sold, leased or marketed recorded as property and equipment was $33 million, $30 million and $22 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Note 7 — Leases

The following table provides information on the components of our operating and finance leases included in our consolidated statement of financial position as of December 31:

Leases	Location on Statement of Financial Position	2021	2020
Assets		(in millions)	
ROU operating lease assets	Operating lease assets, net	$ 933	$ 1,013
ROU finance lease assets	Property and equipment, net	7	14
	Total	$ 940	$ 1,027
Liabilities			
Current			
Operating lease	Operating lease liabilities	$ 195	$ 211
Finance lease	Accrued expenses and other current liabilities	8	11
Noncurrent			
Operating lease	Operating lease liabilities, noncurrent	783	846
Finance lease	Other noncurrent liabilities	5	11
	Total	$ 991	$ 1,079

For the years ended December 31, 2021, 2020 and 2019, our operating lease costs were $293 million, $302 million and $264 million, respectively, including variable lease costs of $10 million, $14 million and $18 million, respectively. Our short-term lease rental expense was $22 million, $20 million and $16 million for the years ended December 31, 2021, 2020 and 2019, respectively. Lease interest expense related to our finance leases for years ended December 31, 2021, 2020 and 2019 was immaterial.

The following table provides information on the weighted average remaining lease term and weighted average discount rate for our operating leases as of December 31:

Operating Lease Term and Discount Rate	2021	2020
Weighted average remaining lease term	6.5 years	6.2 years
Weighted average discount rate	5.4 %	5.7 %

The following table provides supplemental cash flow and non-cash information related to our operating leases as of December 31:

(in millions)	2021	2020	2019
Cash paid for amounts included in the measurement of operating lease liabilities	$ 274	$ 271	$ 232
ROU assets obtained in exchange for operating lease liabilities	100	273	274

Cash paid for amounts included in the measurement of finance lease liabilities and ROU assets obtained in exchange for finance lease liabilities were each immaterial for the years ended December 31, 2021, 2020 and 2019.

The following table provides the schedule of maturities of our operating lease liabilities and a reconciliation of the undiscounted cash flows to the operating lease liabilities recognized in the statement of financial position as of December 31:

(in millions)	2021
2022	$ 241
2023	197
2024	161
2025	138
2026	112
Thereafter	318
Total operating lease payments	1,167
Interest	(189)
Total operating lease liabilities	$ 978

As of December 31, 2021, we had $88 million of additional obligations related to operating leases whose lease term had yet to commence and which are therefore not included in our statement of financial position. These leases are primarily related to real estate and will commence in various months in 2022 and 2023 with lease terms of 1 year to 15 years.

Note 8 — Goodwill and Intangible Assets, net

Changes in goodwill by our reportable segments were as follows for the years ended December 31, 2021 and 2020:

Segment	January 1, 2021	Goodwill Additions and Adjustments	Foreign Currency Translation Adjustments	December 31, 2021
		(in millions)		
Financial Services	$ 932	$ 198	$ (21)	$ 1,109
Healthcare	2,755	84	(8)	2,831
Products and Resources	780	200	(13)	967
Communications, Media and Technology	564	156	(7)	713
Total goodwill	$ 5,031	$ 638	$ (49)	$ 5,620

Segment	January 1, 2020	Goodwill Additions and Adjustments	Foreign Currency Translation Adjustments	December 31, 2020
		(in millions)		
Financial Services	$ 700	$ 204	$ 28	$ 932
Healthcare	2,595	149	11	2,755
Products and Resources	417	346	17	780
Communications, Media and Technology	267	289	8	564
Total goodwill	$ 3,979	$ 988	$ 64	$ 5,031

Based on our most recent goodwill impairment assessment performed as of October 31, 2021, we concluded that the goodwill in each of our reporting units was not at risk of impairment. We have not recognized any impairment losses on our goodwill.

Components of intangible assets were as follows as of December 31:

	2021			2020		
(in millions)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Customer relationships	$ 1,679	$ (610)	$ 1,069	$ 1,333	$ (490)	$ 843
Developed technology	385	(330)	55	388	(286)	102
Indefinite lived trademarks	72	—	72	72	—	72
Finite lived trademarks and other	81	(59)	22	80	(51)	29
Total intangible assets	$ 2,217	$ (999)	$ 1,218	$ 1,873	$ (827)	$ 1,046

Other than certain trademarks with indefinite lives, our intangible assets have finite lives and, as such, are subject to amortization. Amortization of intangible assets totaled $182 million for 2021, $152 million for 2020 and $162 million for 2019.

The following table provides the estimated amortization expense related to our existing intangible assets for the next five years.

(in millions)	Estimated Amortization
2022	$ 186
2023	144
2024	139
2025	136
2026	132

Note 9 — Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities were as follows as of December 31:

(in millions)	2021	2020
Compensation and benefits	$ 1,601	$ 1,607
Customer volume and other incentives	242	266
Income taxes	74	34
Professional fees	220	143
Other	395	469
Total accrued expenses and other current liabilities	$ 2,532	$ 2,519

Note 10 — Debt

In 2018, we entered into a Credit Agreement providing for a $750 million Term Loan and a $1,750 million unsecured revolving credit facility, which are due to mature in November 2023. We are required under the Credit Agreement to make scheduled quarterly principal payments on the Term Loan.

The Credit Agreement requires interest to be paid, at our option, at either the ABR, the Eurocurrency Rate or the Daily Simple RFR (each as defined in the Credit Agreement), plus, in each case, an Applicable Margin (as defined in the Credit Agreement). Initially, the Applicable Margin is 0.875% with respect to Eurocurrency Rate and Daily Simple RFR and 0.00% with respect to ABR loans. Subsequently, the Applicable Margin with respect to Eurocurrency Rate and Daily Simple RFR may range from 0.75% to 1.125%, depending on our public debt ratings (or, if we have not received public debt ratings, from 0.875% to 1.125%, depending on our Leverage Ratio, which is the ratio of indebtedness for borrowed money to Consolidated EBITDA, as defined in the Credit Agreement). The Term Loan is a Eurocurrency loan. As the interest rates on our Term Loan and any notes outstanding under the revolving credit facility are variable, the fair value of our debt balances approximates their carrying value as of December 31, 2021 and 2020. Under the Credit Agreement, we are required to pay commitment fees on the unused portion of the revolving credit facility, which vary based on our public debt ratings (or, if we have not received public debt ratings, on the Leverage Ratio).

The Credit Agreement contains customary affirmative and negative covenants as well as a financial covenant. The financial covenant is tested at the end of each fiscal quarter and requires us to maintain a Leverage Ratio, which is the ratio of indebtedness for borrowed money to Consolidated EBITDA, as defined in the Credit Agreement, not in excess of 3.50 to 1.00, or for a period of up to four quarters following certain material acquisitions, 3.75 to 1.00. We were in compliance with all debt covenants and representations of the Credit Agreement as of December 31, 2021.

In February 2021, our India subsidiary renewed its 13 billion Indian rupee ($175 million at the December 31, 2021 exchange rate) working capital facility, which requires us to repay any balances within 90 days from the date of disbursement. There is a 1.0% prepayment penalty applicable to payments made within 30 days of disbursement. This working capital facility contains affirmative and negative covenants and may be renewed annually in February. As of December 31, 2021, we have not borrowed funds under this facility.

Short-term Debt

As of both December 31, 2021 and December 31, 2020, we had $38 million of short-term debt related to current maturities of our Term Loan, with a weighted average interest rate of 1.0% in both periods.

Long-term Debt

The following summarizes our long-term debt balances as of December 31:

(in millions)	2021	2020
Term Loan	$ 666	$ 703
Less:		
Current maturities	(38)	(38)
Deferred financing costs	(2)	(2)
Long-term debt, net of current maturities	$ 626	$ 663

The following represents the schedule of maturities of our term loan:

Year	Amounts (in millions)
2022	$ 38
2023	628
Total	$ 666

Note 11 — Income Taxes

Income before provision for income taxes shown below is based on the geographic location to which such income was attributed for years ended December 31:

(in millions)	2021	2020	2019
United States	$ 818	$ 814	$ 931
Foreign	2,009	1,282	1,612
Income before provision for income taxes	$ 2,827	$ 2,096	$ 2,543

The provision for income taxes consisted of the following components for the years ended December 31:

(in millions)	2021	2020	2019
Current:			
Federal and state	$ 210	$ 137	$ 549
Foreign	456	383	400
Total current provision	666	520	949
Deferred:			
Federal and state	(50)	(77)	(320)
Foreign	77	261	14
Total deferred provision (benefit)	27	184	(306)
Total provision for income taxes	$ 693	$ 704	$ 643

In the third quarter of 2020, we reversed our indefinite reinvestment assertion on Indian earnings accumulated in prior years and recorded a $140 million Tax on Accumulated Indian Earnings. The recorded income tax expense reflects the India withholding tax on unrepatriated Indian earnings, which were $5.2 billion as of December 31, 2019, net of applicable U.S. foreign tax credits.

We are involved in two separate ongoing disputes with the ITD in connection with previously disclosed share repurchase transactions undertaken by CTS India in 2013 and 2016 to repurchase shares from its shareholders (non-Indian Cognizant entities) valued at $523 million and $2.8 billion, respectively.

The 2016 transaction was undertaken pursuant to a plan approved by the High Court in Chennai, India, and resulted in the payment of $135 million in Indian income taxes - an amount we believe includes all the applicable taxes owed for this transaction under Indian law. In March 2018, the ITD asserted that it is owed an additional 33 billion Indian rupees ($443 million at the December 31, 2021 exchange rate) on the 2016 transaction. We deposited 5 billion Indian rupees, representing 15% of the disputed tax amount related to the 2016 transaction, with the ITD. As of December 31, 2021 and 2020, the deposit with the ITD was $67 million and $68 million, respectively, presented in "Other noncurrent assets" in our consolidated statements of financial position. Additionally, certain time deposits of CTS India were placed under lien in favor of the ITD, representing the remainder of the disputed tax amount. As of December 31, 2021 and 2020, the balance of deposits under lien was 30 billion Indian rupees, including previously earned interest, or $397 million and $405 million, respectively, as presented in "Long-term investments" in our consolidated statements of financial position.

We are currently in litigation with the ITD on the 2016 share repurchase transaction dispute. More recently, in April 2020, we received a formal assessment from the ITD, which is consistent with its previous assertions regarding our 2016 transaction. In June 2020, we filed an appeal against this assessment. The dispute in relation to the 2013 share repurchase transaction is also in litigation. At this time, the ITD has not made specific demands with regards to the 2013 share repurchase transaction.

We believe we have paid all applicable taxes owed on both the 2016 and the 2013 transactions. Accordingly, we have not recorded any reserves for these matters as of December 31, 2021.

The reconciliation between the U.S. federal statutory rate and our effective income tax rate were as follows for the years ended December 31:

(Dollars in millions)	2021	%	2020	%	2019	%
Tax expense, at U.S. federal statutory rate	$ 594	21.0	$ 440	21.0	$ 534	21.0
State and local income taxes, net of federal benefit	50	1.8	52	2.5	59	2.3
Non-taxable income for Indian tax purposes	(36)	(1.3)	(48)	(2.3)	(90)	(3.5)
Rate differential on foreign earnings	137	4.8	178	8.5	145	5.7
Net impact related to the India Tax Law	—	—	—	—	21	0.8
Recognition of benefits related to uncertain tax positions	(14)	(0.5)	—	—	—	—
Credits and other incentives	(42)	(1.5)	(51)	(2.4)	(57)	(2.2)
Reversal of indefinite reinvestment assertion	—	—	140	6.6	—	—
Other	4	0.2	(7)	(0.3)	31	1.2
Total provision for income taxes	$ 693	24.5	$ 704	33.6	$ 643	25.3

The significant components of deferred income tax assets and liabilities recorded on the consolidated statements of financial position were as follows as of December 31:

(in millions)	2021	2020
Deferred income tax assets:		
Net operating losses	$ 52	$ 36
Revenue recognition	116	41
Compensation and benefits	230	259
MAT and credit carryforwards	27	109
Expenses not currently deductible	121	147
	546	592
Less: valuation allowance	(46)	(29)
Deferred income tax assets, net	500	563
Deferred income tax liabilities:		
Depreciation and amortization	202	198
Deferred costs	84	105
Other	28	21
Deferred income tax liabilities	314	324
Net deferred income tax assets	$ 186	$ 239

At December 31, 2021, we had foreign and U.S. net operating loss carryforwards of approximately $117 million and $114 million, respectively. We have recorded valuation allowances on certain net operating loss carryforwards. As of December 31, 2021 and 2020, deferred income tax assets related to the MAT carryforwards were $16 million and $98 million, respectively. The calculation of the MAT includes all profits realized by our Indian subsidiaries and any MAT paid is creditable against future corporate income tax, subject to certain limitations.

Our Indian subsidiaries are primarily export-oriented and are eligible for certain income tax holiday benefits granted by the government of India for export activities conducted within SEZs for periods of up to 15 years. Our SEZ income tax holiday benefits are currently scheduled to expire in whole or in part through the year 2028 and may be extended on a limited basis for an additional five years per unit if certain reinvestment criteria are met. Our Indian profits ineligible for SEZ benefits are subject to corporate income tax at the rate of 34.94%. In addition, all Indian profits, including those generated within SEZs, are subject to the MAT. The current rate of MAT is 17.47%. For the years ended December 31, 2021, 2020 and 2019, the effect of the income tax holidays granted by the Indian government was to reduce the overall income tax provision and increase net income by $36 million, $48 million and $90 million, respectively, and increase diluted EPS by $0.07, $0.09 and $0.16, respectively.

In December 2019, the Government of India enacted the India Tax Law effective retroactively to April 1, 2019 that enables Indian companies to elect to be taxed at a lower income tax rate of 25.17%, as compared to the current income tax rate of 34.94%. Once a company elects into the lower income tax rate, a company may not benefit from any tax holidays associated with SEZs and certain other tax incentives, including MAT carryforwards, and may not reverse its election. While our existing MAT carryforwards expire between March 2027 and March 2032, we expect to fully or substantially utilize our existing MAT carryforwards prior to the start of the new India fiscal year on April 1, 2022. Our current intent is to elect into the new tax regime once our MAT carryforwards are fully or substantially utilized. As a result of the enactment of the India Tax Law, we recorded a one-time net income tax expense of $21 million in 2019, due to the revaluation to the lower income tax rate of our India net deferred income tax assets that are expected to reverse after we expect to elect into the new tax regime.

We conduct business globally and file income tax returns in the United States, including federal and state, as well as various foreign jurisdictions. In 2021, we reached an agreement with the IRS, which settled tax years 2012 through 2016. As a result of this settlement, in the first quarter of 2021, we recorded a $14 million discrete benefit to the provision for income taxes. Tax years that remain subject to examination by the IRS are 2017 and onward, and years that remain subject to examination by state authorities vary by state. Years under examination by foreign tax authorities are 2001 and onward. In addition, transactions between our affiliated entities are arranged in accordance with applicable transfer pricing laws, regulations and relevant guidelines. As a result, and due to the interpretive nature of certain aspects of these laws and guidelines, we have pending applications for APAs before the taxing authorities in some of our most significant jurisdictions.

We record incremental tax expense, based upon the more-likely-than-not standard, for any uncertain tax positions. In addition, when applicable, we adjust the previously recorded income tax expense to reflect examination results when the position is effectively settled or otherwise resolved. Our ongoing evaluations of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can result in adjustments that increase or decrease our effective income tax rate, as well as impact our operating results. The specific timing of when the resolution of each tax position will be reached is uncertain.

Changes in unrecognized income tax benefits were as follows for the years ended December 31:

(in millions)	2021	2020	2019
Balance, beginning of year	$ 193	$ 152	$ 117
Additions based on tax positions related to the current year	34	28	22
Additions for tax positions of prior years	16	10	14
Additions for tax positions of acquired subsidiaries	12	3	—
Reductions for tax positions due to lapse of statutes of limitations	(17)	—	—
Reductions for tax positions of prior years	—	—	(1)
Settlements	(43)	—	—
Foreign currency exchange movement	(1)	—	—
Balance, end of year	$ 194	$ 193	$ 152

The unrecognized income tax benefits would affect our effective income tax rate, if recognized. While the Company believes uncertain tax positions may be settled or resolved within the next twelve months, it is difficult to estimate the income tax impact of these potential resolutions at this time. We recognize accrued interest and any penalties associated with uncertain tax positions as part of our provision for income taxes. The total amount of accrued interest and penalties at December 31, 2021 and 2020 was $30 million and $22 million, respectively, and relates to U.S. and foreign tax matters. The amounts of interest and penalties recorded in the provision for income taxes in 2021, 2020 and 2019 were immaterial.

Note 12 — Derivative Financial Instruments

In the normal course of business, we use foreign exchange forward and option contracts to manage foreign currency exchange rate risk. Derivatives may give rise to credit risk from the possible non-performance by counterparties. Credit risk is limited to the fair value of those contracts that are favorable to us. We have limited our credit risk by limiting the amount of credit exposure with any one financial institution and conducting ongoing evaluation of the creditworthiness of the financial institutions with which we do business. In addition, all the assets and liabilities related to our foreign exchange derivative contracts set forth in the below table are subject to master netting arrangements, such as the International Swaps and Derivatives Association Master Agreement, with each individual counterparty. These master netting arrangements generally provide for net settlement of all outstanding contracts with the counterparty in the case of an event of default or a termination event. We have presented all the assets and liabilities related to our foreign exchange derivative contracts, as applicable, on a gross basis, with no offsets, in our consolidated statements of financial position. There is no financial collateral (including cash collateral) posted or received by us related to our foreign exchange derivative contracts.

The following table provides information on the location and fair values of derivative financial instruments included in our consolidated statements of financial position as of December 31:

(in millions)		2021		2020	
Designation of Derivatives	**Location on Statement of Financial Position**	**Assets**	**Liabilities**	**Assets**	**Liabilities**
Foreign exchange forward and option contracts – Designated as cash flow hedging instruments	Other current assets	$ 51	$ —	$ 45	$ —
	Other noncurrent assets	15	—	26	—
	Total	66	—	71	—
Foreign exchange forward contracts - Not designated as cash flow hedging instruments	Other current assets	3	—	1	—
	Accrued expenses and other current liabilities	—	7	—	1
	Total	3	7	1	1
Total		$ 69	$ 7	$ 72	$ 1

Cash Flow Hedges

We have entered into a series of foreign exchange derivative contracts that are designated as cash flow hedges of Indian rupee denominated payments in India. These contracts are intended to partially offset the impact of movement of the Indian rupee against the U.S. dollar on future operating costs and are scheduled to mature each month during 2022 and 2023. The changes in fair value of these contracts are initially reported in "Accumulated other comprehensive income (loss)" in our consolidated statements of financial position and are subsequently reclassified to earnings within "Cost of revenues" and "Selling, general and administrative expenses" in our consolidated statements of operations in the same period that the forecasted Indian rupee denominated payments are recorded in earnings. As of December 31, 2021, we estimate that $45 million, net of tax, of the net gains related to derivatives designated as cash flow hedges reported in the caption "Accumulated other comprehensive income (loss)" in our consolidated statements of financial position is expected to be reclassified into earnings within the next 12 months.

The notional value of our outstanding contracts by year of maturity was as follows as of December 31:

(in millions)	2021	2020
2021	$ —	$ 1,470
2022	1,643	803
2023	880	—
Total notional value of contracts outstanding (1)	$ 2,523	$ 2,273

(1) Includes $78 million and $133 million notional value of option contracts as of December 31, 2021 and 2020, with the remaining notional value related to forward contracts.

The following table provides information on the location and amounts of pre-tax gains on our cash flow hedges for the year ended December 31:

(in millions)	Change in Derivative Gains Recognized in Accumulated Other Comprehensive Income (Loss) (effective portion)		Location of Net Derivative Gains Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (effective portion)	Net Gains Reclassified from Accumulated Other Comprehensive Income (Loss) into Income (effective portion)	
	2021	2020		2021	2020
Foreign exchange forward and option contracts – Designated as cash flow hedging instruments	$ 67	$ 39	Cost of revenues	$ 55	$ 3
			Selling, general and administrative expenses	8	—
			Total	$ 63	$ 3

The activity related to the change in net unrealized gains on our cash flow hedges included in "Accumulated other comprehensive income (loss)" in our consolidated statements of stockholders' equity is presented in Note 14.

Other Derivatives

We use foreign exchange forward contracts to provide an economic hedge against balance sheet exposures to certain monetary assets and liabilities denominated in currencies other than the functional currency of our foreign subsidiaries. We entered into foreign exchange forward contracts that are scheduled to mature in 2022. Realized gains or losses and changes in the estimated fair value of these derivative financial instruments are recorded in the caption "Foreign currency exchange gains (losses), net" in our consolidated statements of operations.

Additional information related to our outstanding foreign exchange forward contracts not designated as hedging instruments was as follows as of December 31:

(in millions)	2021		2020	
	Notional	Fair Value	Notional	Fair Value
Contracts outstanding	$ 847	$ (4)	$ 637	$ —

The following table provides information on the location and amounts of realized and unrealized pre-tax gains (losses) on our other derivative financial instruments for the year ended December 31:

(in millions)	Location of Net Gains (Losses) on Derivative Instruments	Amount of Net Gains (Losses) on Derivative Instruments	
		2021	2020
Foreign exchange forward contracts - Not designated as hedging instruments	Foreign currency exchange gains (losses), net	$ 13	$ (63)

The related cash flow impacts of all of our derivative activities are reflected as cash flows from operating activities.

Note 13 — Fair Value Measurements

We measure our cash equivalents, certain investments, contingent consideration liabilities and foreign exchange forward and option contracts at fair value. Fair value is the exit price, or the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable. Observable inputs reflect assumptions market participants would use in pricing an asset or liability based on market data obtained from independent sources while unobservable inputs reflect a reporting entity's pricing based upon their own market assumptions.

The fair value hierarchy consists of the following three levels:

- Level 1 – Inputs are quoted prices in active markets for identical assets or liabilities.
- Level 2 – Inputs are quoted prices for similar assets or liabilities in an active market, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable and market-corroborated inputs which are derived principally from or corroborated by observable market data.
- Level 3 – Inputs are derived from valuation techniques in which one or more significant inputs or value drivers are unobservable.

The following table summarizes our financial assets and (liabilities) measured at fair value on a recurring basis as of December 31, 2021:

(in millions)	**Level 1**	**Level 2**	**Level 3**	**Total**
Cash equivalents:				
Money market funds	$ 507	$ —	$ —	$ 507
Time deposits	—	4	—	4
Commercial paper	—	266	—	266
Short-term investments:				
Time deposits	—	554	—	554
Equity investment security	26	—	—	26
Available-for-sale investment securities:				
Commercial paper	—	310	—	310
Other current assets				
Foreign exchange forward and option contracts	—	54	—	54
Long-term investments:				
Restricted time deposits [(1)]	—	397	—	397
Other noncurrent assets				
Foreign exchange forward contracts	—	15	—	15
Accrued expenses and other current liabilities:				
Foreign exchange forward contracts	—	(7)	—	(7)
Contingent consideration liabilities	—	—	(14)	(14)
Other noncurrent liabilities				
Contingent consideration liabilities	—	—	(21)	(21)

(1) See Note 11.

The following table summarizes our financial assets and (liabilities) measured at fair value on a recurring basis as of December 31, 2020:

(in millions)	Level 1	Level 2	Level 3	Total
Cash equivalents:				
Money market funds	$ 209	$ —	$ —	$ 209
Time Deposits	—	203	—	203
Commercial Paper	—	200	—	200
Short-term investments:				
Time deposits	—	3	—	3
Equity investment security	27	—	—	27
Other current assets:				
Foreign exchange forward and option contracts	—	46	—	46
Long-term investments				
Restricted time deposits (1)	—	405	—	405
Other noncurrent assets:				
Foreign exchange forward and option contracts	—	26	—	26
Accrued expenses and other current liabilities:				
Foreign exchange forward contracts	—	(1)	—	(1)
Contingent consideration liabilities	—	—	(11)	(11)
Other noncurrent liabilities:				
Contingent consideration liabilities	—	—	(43)	(43)

(1) See Note 11

The following table summarizes the changes in Level 3 contingent consideration liabilities:

(in millions)	2021	2020
Beginning balance	$ 54	$ 38
Initial measurement recognized at acquisition	24	42
Change in fair value recognized in SG&A expenses	(30)	(23)
Payments and other adjustments	(13)	(3)
Ending balance	$ 35	$ 54

We measure the fair value of money market funds based on quoted prices in active markets for identical assets and measure the fair value of our equity security based on the published daily net asset value at which investors can freely subscribe to or redeem from the fund. The fair value of commercial paper is measured based on relevant trade data, dealer quotes, or model-driven valuations using significant inputs derived from or corroborated by observable market data, such as yield curves and credit spreads. The carrying value of the time deposits approximated fair value as of December 31, 2021 and 2020.

We estimate the fair value of each foreign exchange forward contract by using a present value of expected cash flows model. This model calculates the difference between the current market forward price and the contracted forward price for each foreign exchange contract and applies the difference in the rates to each outstanding contract. The market forward rates include a discount and credit risk factor. We estimate the fair value of each foreign exchange option contract by using a variant of the
Black-Scholes model. This model uses present value techniques and reflects the time value and intrinsic value based on
observable market rates.

We estimate the fair value of our contingent consideration liabilities associated with our acquisitions using a variation of the income approach, which utilizes one or more significant inputs that are unobservable. This approach calculates the fair value of such liabilities based on the probability-weighted expected performance of the acquired entity against the target performance metric, discounted to present value when appropriate.

During the years ended December 31, 2021, 2020 and 2019 there were no transfers among Level 1, Level 2 or Level 3 financial assets and liabilities.

Note 14 — Accumulated Other Comprehensive Income (Loss)

Changes in "Accumulated other comprehensive income (loss)" by component were as follows for the year ended December 31, 2021:

	2021		
(in millions)	**Before Tax Amount**	**Tax Effect**	**Net of Tax Amount**
Foreign currency translation adjustments:			
Beginning balance	$ 56	$ (1)	$ 55
Change in foreign currency translation adjustments	(78)	3	(75)
Ending balance	$ (22)	$ 2	$ (20)
Unrealized gains on cash flow hedges:			
Beginning balance	$ 67	$ (12)	$ 55
Unrealized gains arising during the period	67	(13)	54
Reclassifications of net (gains) to:			
Cost of revenues	(55)	10	(45)
SG&A expenses	(8)	1	(7)
Net change	4	(2)	2
Ending balance	$ 71	$ (14)	$ 57
Accumulated other comprehensive income (loss):			
Beginning balance	$ 123	$ (13)	$ 110
Other comprehensive income (loss)	(74)	1	(73)
Ending balance	$ 49	$ (12)	$ 37

Changes in "Accumulated other comprehensive income (loss)" by component were as follows for the years ended December 31, 2020 and 2019:

	2020			2019		
(in millions)	**Before Tax Amount**	**Tax Effect**	**Net of Tax Amount**	**Before Tax Amount**	**Tax Effect**	**Net of Tax Amount**
Foreign currency translation adjustments:						
Beginning balance	$ (63)	$ (1)	$ (64)	$ (108)	$ 5	$ (103)
Change in foreign currency translation adjustments	119	—	119	45	(6)	39
Ending balance	$ 56	$ (1)	$ 55	$ (63)	$ (1)	$ (64)
Unrealized (losses) on available-for-sale investment securities:						
Beginning balance	$ —	$ —	$ —	$ (12)	$ 4	$ (8)
Net unrealized gains arising during the period	—	—	—	13	(4)	9
Reclassification of net (gains) to Other, net	—	—	—	(1)	—	(1)
Net change	—	—	—	12	(4)	8
Ending balance	$ —	$ —	$ —	$ —	$ —	$ —
Unrealized gains (losses) on cash flow hedges:						
Beginning balance	$ 31	$ (5)	$ 26	$ (4)	$ 1	$ (3)
Unrealized gains arising during the period	39	(8)	31	39	(7)	32
Reclassifications of net (gains) to:						
Cost of revenues	(3)	1	(2)	(3)	1	(2)
SG&A expenses	—	—	—	(1)	—	(1)
Net change	36	(7)	29	35	(6)	29
Ending balance	$ 67	$ (12)	$ 55	$ 31	$ (5)	$ 26
Accumulated other comprehensive income (loss):						
Beginning balance	$ (32)	$ (6)	$ (38)	$ (124)	$ 10	$ (114)
Other comprehensive income (loss)	155	(7)	148	92	(16)	76
Ending balance	$ 123	$ (13)	$ 110	$ (32)	$ (6)	$ (38)

Note 15 — Commitments and Contingencies

We are involved in various claims and legal proceedings arising in the ordinary course of business. We accrue a liability when a loss is considered probable and the amount can be reasonably estimated. When a material loss contingency is reasonably possible but not probable, we do not record a liability, but instead disclose the nature and the amount of the claim, and an estimate of the loss or range of loss, if such an estimate can be made. Legal fees are expensed as incurred. While we do not expect that the ultimate resolution of any existing claims and proceedings (other than the specific matters described below, if decided adversely), individually or in the aggregate, will have a material adverse effect on our financial position, an unfavorable outcome in some or all of these proceedings could have a material adverse impact on results of operations or cash flows for a particular period. This assessment is based on our current understanding of relevant facts and circumstances. As such, our view of these matters is subject to inherent uncertainties and may change in the future.

On January 15, 2015, Syntel sued TriZetto and Cognizant in the USDC-SDNY. Syntel's complaint alleged breach of contract against TriZetto, and tortious interference and misappropriation of trade secrets against Cognizant and TriZetto, stemming from Cognizant's hiring of certain former Syntel employees. Cognizant and TriZetto countersued on March 23, 2015, for breach of contract, misappropriation of trade secrets and tortious interference, based on Syntel's misuse of TriZetto confidential information and abandonment of contractual obligations. Cognizant and TriZetto subsequently added federal Defend Trade Secrets Act and copyright infringement claims for Syntel's misuse of TriZetto's proprietary technology. The parties' claims were narrowed by the court and the case was tried before a jury, which on October 27, 2020, returned a verdict in favor of Cognizant in the amount of $855 million, including $570 million in punitive damages. On April 20, 2021, the USDC-SDNY issued a post-trial order that, among other things, affirmed the jury's award of $285 million in actual damages, but reduced the award of punitive damages from $570 million to $285 million, thereby reducing the overall damages award from $855 million to $570 million. The USDC-SDNY subsequently issued a final judgment consistent with the April 20th order. On May 26, 2021, Syntel filed a notice of appeal to the Second Circuit, and on June 3, 2021 the USDC-SDNY stayed execution of judgment pending appeal. The appeal is pending before the Second Circuit. We will not record the gain in our financial statements until it becomes realizable.

On February 28, 2019, a ruling of the SCI interpreting the India Defined Contribution Obligation altered historical understandings of the obligation, extending it to cover additional portions of the employee's income. As a result, the ongoing contributions of our affected employees and the Company were required to be increased. In the first quarter of 2019, we accrued $117 million with respect to prior periods, assuming retroactive application of the Supreme Court's ruling, in "Selling, general and administrative expenses" in our consolidated statement of operations. There is significant uncertainty as to how the liability should be calculated as it is impacted by multiple variables, including the period of assessment, the application with respect to certain current and former employees and whether interest and penalties may be assessed. Since the ruling, a variety of trade associations and industry groups have advocated to the Indian government, highlighting the harm to the information technology sector, other industries and job growth in India that would result from a retroactive application of the ruling. It is possible the Indian government will review the matter and there is a substantial question as to whether the Indian government will apply the SCI's ruling on a retroactive basis. As such, the ultimate amount of our obligation may be materially different from the amount accrued.

On October 5, 2016, October 27, 2016 and November 18, 2016, three putative securities class action complaints were filed in the USDC-NJ naming us and certain of our current and former officers at that time as defendants. These complaints were consolidated into a single action and on April 7, 2017, the lead plaintiffs filed a consolidated amended complaint on behalf of a putative class of persons and entities who purchased our common stock during the period between February 27, 2015 and September 29, 2016, naming us and certain of our current and former officers at that time as defendants and alleging violations of the Exchange Act, based on allegedly false or misleading statements related to potential violations of the Foreign Corrupt Practices Act, our business, prospects and operations, and the effectiveness of our internal controls over financial reporting and our disclosure controls and procedures. The lead plaintiffs sought an award of compensatory damages, among other relief, and their reasonable costs and expenses, including attorneys' fees. Defendants filed motions to dismiss the consolidated amended complaint on June 6, 2017. On August 8, 2018, the USDC-NJ issued an order which granted the motions to dismiss in part, including dismissal of all claims against then-current officers of the Company, and denied them in part. On September 7, 2018, we filed a motion in the USDC-NJ to certify the August 8, 2018 order for immediate appeal to the United States Court of Appeals for the Third Circuit pursuant to 28 U.S.C. § 1292(b). On October 18, 2018, the USDC-NJ issued an order granting our motion, and staying the action pending the outcome of our appeal petition to the Third Circuit. On October 29, 2018, we filed a petition for permission to appeal with the Third Circuit. On March 6, 2019, the Third Circuit denied our petition without prejudice. In an order dated March 19, 2019, the USDC-NJ directed the lead plaintiffs to provide the defendants with a proposed amended complaint. On April 26, 2019, lead plaintiffs filed their second amended complaint. We filed a motion to dismiss the second amended complaint on June 10, 2019. On June 7, 2020, the USDC-NJ issued an order denying our motion to dismiss the second amended complaint. On July 10, 2020, we filed our answer to the second amended complaint. On July 23, 2020, the DOJ filed a motion on consent for leave to intervene and to stay all discovery through the conclusion of the criminal proceedings in *United States v. Gordon J. Coburn and Steven Schwartz*, Crim. No. 19-120 (KM), except for documents produced by us to the DOJ in connection with those criminal proceedings. On July 24, 2020, the USDC-NJ granted the DOJ's motion; and on that same day, we filed a motion in the USDC-NJ to certify the June 7, 2020 order for immediate appeal to the Third Circuit pursuant to 28 U.S.C. § 1292(b). On March 17, 2021, the USDC-NJ issued an order denying our motion.

On September 7, 2021, the parties filed a settlement agreement that resolved the consolidated putative securities class action against us and certain of our former officers. The settlement agreement provides for a payment of $95 million to the putative class (inclusive of attorneys' fees and litigation expenses). Adjusting for indemnification expenses, legal fees and other covered expenses incurred through September 7, 2021, the remaining available balance under the applicable directors and officers insurance policies was $75 million. As a result, we recorded a loss of $20 million in "Selling, general and administrative expenses" in our consolidated financial statements. The loss is referred to as the Class Action Settlement Loss. We and the other defendants entered into the settlement agreement to eliminate the uncertainty, burden, and expense of further protracted litigation. We and the other defendants expressly deny that the plaintiffs in the consolidated putative securities class action have asserted any valid claims as to us and them, respectively. On September 9, 2021, the USDC-NJ granted preliminary approval of the settlement. On December 21, 2021, the USDC-NJ granted final approval of the settlement and entered a judgment dismissing the consolidated putative securities class action with prejudice. The deadline to appeal the judgement was January 20, 2022, and no appeals were filed before that date.

On October 31, 2016, November 15, 2016 and November 18, 2016, three putative shareholder derivative complaints were filed in New Jersey Superior Court, Bergen County, naming us, all of our then current directors and certain of our current and former officers at that time as defendants. These actions were consolidated in an order dated January 24, 2017. The complaints assert claims for breach of fiduciary duty, corporate waste, unjust enrichment, abuse of control, mismanagement, and/or insider selling by defendants. On March 16, 2017, the parties filed a stipulation deferring all further proceedings pending a final, non-appealable ruling on the then-anticipated motion to dismiss the consolidated putative securities class action. On April 26, 2017, in lieu of ordering the stipulation filed by the parties, the New Jersey Superior Court deferred further proceedings by dismissing the consolidated putative shareholder derivative litigation without prejudice but permitting the parties to file a motion to vacate the dismissal in the future.

On February 22, 2017, April 7, 2017 and May 10, 2017, three additional putative shareholder derivative complaints alleging similar claims were filed in the USDC-NJ, naming us and certain of our current and former directors and officers at that time as defendants. These complaints asserted claims similar to those in the previously-filed putative shareholder derivative actions. In an order dated June 20, 2017, the USDC-NJ consolidated these actions into a single action, appointed lead plaintiff and lead counsel, and stayed all further proceedings pending a final, non-appealable ruling on the motions to dismiss the consolidated putative securities class action. On October 30, 2018, lead plaintiff filed a consolidated verified derivative complaint.

On March 11, 2019, a seventh putative shareholder derivative complaint was filed in the USDC-NJ, naming us and certain of our current and former directors and officers at that time as defendants. The complaint in that action asserts claims similar to those in the previously-filed putative shareholder derivative actions. On May 14, 2019, the USDC-NJ approved a stipulation that (i) consolidated this action with the putative shareholder derivative suits that were previously filed in the USDC-NJ; and (ii) stayed all of these suits pending an order on the motion to dismiss the second amended complaint in the consolidated putative securities class action. On August 3, 2020, lead plaintiffs filed an amended complaint. The USDC-NJ extended the stay through February 14, 2022. On February 14, 2022, we and certain of our current and former directors and officers moved to dismiss the amended complaint.

On June 1, 2021, an eighth putative shareholder derivative complaint was filed in the USDC-NJ, naming us and certain of our current and former directors and officers at that time as defendants. The complaint asserts claims similar to those in the previously-filed putative shareholder derivative actions. On August 2, 2021, the USDC-NJ approved a stipulation that stayed this action through the earliest of (i) the conclusion of the criminal proceedings in United States v. Gordon J. Coburn and Steven Schwartz, Crim. No. 19-120 (KM), (ii) the dissolution of the stay in the consolidated putative securities class action, provided that the dissolution of the stay in the consolidated putative securities class action is not the result of a settlement agreement or other mutual resolution of the consolidated putative securities class action, or (iii) the dissolution of the stay in the consolidated putative shareholder derivative action pending in USDC-NJ, provided that we are required to answer, move to dismiss, or otherwise respond to the operative complaint in that action following the dissolution of the stay. The stay ended on February 14, 2022, and the litigation is ongoing.

We are presently unable to predict the duration, scope or result of the putative shareholder derivative actions. These lawsuits are subject to inherent uncertainties, the actual cost of such litigation will depend upon many unknown factors and the outcome of the litigation is necessarily uncertain.

We have indemnification and expense advancement obligations pursuant to our bylaws and indemnification agreements with respect to certain current and former members of senior management and the Company's board of directors. In connection with the matters that were the subject of our previously disclosed internal investigation, the DOJ and SEC investigations and the related litigation, we have received and expect to continue to receive requests under such indemnification agreements and our bylaws to provide funds for legal fees and other expenses. As of the filing of the settlement agreement on September 7, 2021, there are no amounts remaining available to us under applicable insurance policies for our ongoing indemnification and advancement obligations with respect to certain of our current and former officers and directors or incremental legal fees and other expenses related to the above matters.

See Note 11 for information relating to the ITD Dispute.

Many of our engagements involve projects that are critical to the operations of our clients' business and provide benefits that are difficult to quantify. Any failure in a client's systems or our failure to meet our contractual obligations to our clients, including any breach involving a client's confidential information or sensitive data, or our obligations under applicable laws or regulations could result in a claim for substantial damages against us, regardless of our responsibility for such failure. Although we attempt to contractually limit our liability for damages arising from negligent acts, errors, mistakes, or omissions in rendering our services, there can be no assurance that the limitations of liability set forth in our contracts will be enforceable in all instances or will otherwise protect us from liability for damages. Although we have general liability insurance coverage, including coverage for errors or omissions, we retain a significant portion of risk through our insurance deductibles and there can be no assurance that such coverage will cover all types of claims, continue to be available on reasonable terms or will be available in sufficient amounts to cover one or more large claims, or that the insurer will not disclaim coverage as to any future claim. The successful assertion of one or more large claims against us that exceed or are not covered by our insurance coverage or changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, results of operations, financial position and cash flows for a particular period.

In the normal course of business and in conjunction with certain client engagements, we have entered into contractual arrangements through which we may be obligated to indemnify clients or other parties with whom we conduct business with respect to certain matters. These arrangements can include provisions whereby we agree to hold the indemnified party and certain of their affiliated entities harmless with respect to third-party claims related to such matters as our breach of certain representations or covenants, our intellectual property infringement, our gross negligence or willful misconduct or certain other claims made against certain parties. Payments by us under any of these arrangements are generally conditioned on the client making a claim and providing us with full control over the defense and settlement of such claim. It is not possible to determine the maximum potential liability under these indemnification agreements due to the unique facts and circumstances involved in each particular agreement. Historically, we have not made material payments under these indemnification agreements and therefore they have not had a material impact on our operating results, financial position, or cash flows. However, if events arise requiring us to make payment for indemnification claims under our indemnification obligations in contracts we have entered, such payments could have a material adverse effect on our business, results of operations, financial position and cash flows for a particular period.

Note 16 — Employee Benefits

We contribute to defined contribution plans in the United States and Europe, including 401(k) savings and supplemental retirement plans in the United States. Total expenses for our contributions to these plans were $135 million, $118 million and $117 million for the years ended December 31, 2021, 2020 and 2019, respectively.

We maintain employee benefit plans that cover substantially all India-based employees. The employees' provident fund, pension and family pension plans are statutorily defined contribution retirement benefit plans. Under the plans, employees contribute up to 12.0% of their eligible compensation, which is matched by an equal contribution by the Company. For these plans, we recognized a contribution expense of $121 million, $98 million and $101 million for the years ended December 31, 2021, 2020 and 2019, respectively. On February 28, 2019, a ruling of the SCI altered historical understandings of the obligation under these plans, extending them to cover additional portions of the employee's income. In the first quarter of 2019, we accrued $117 million with respect to prior periods, assuming retroactive application of the SCI's ruling, in "Selling, general and administrative expenses" in our consolidated statements of operations. See Note 15 for further information.

We also maintain a gratuity plan in India that is a statutory post-employment benefit plan providing defined lump sum benefits. We make annual contributions to the employees' gratuity fund established with a government-owned insurance corporation to fund a portion of the estimated obligation. Accordingly, our liability for the gratuity plan reflected the undiscounted benefit obligation payable as of the balance sheet date, which was based upon the employees' salary and years of service. As of December 31, 2021 and 2020, the amount accrued under the gratuity plan was $118 million and $124 million, which is net of fund assets of $212 million and $186 million, respectively. Expense recognized by us was $70 million, $35 million and $38 million for the years ended December 31, 2021, 2020 and 2019, respectively.

Note 17 — Stock-Based Compensation Plans

The Company's 2017 Incentive Plan and the Purchase Plan provide for the issuance of up to 48.8 million (plus any shares underlying outstanding awards that are forfeited under the 2009 Incentive Plan) and 40.0 million shares, respectively, of Class A common stock to eligible employees. The 2017 Incentive Plan does not affect any awards outstanding under the 2009 Incentive Plan. As of December 31, 2021, we have 22.2 million and 3.9 million shares available for grant under the 2017 Incentive Plan and the Purchase Plan, respectively.

The allocation of total stock-based compensation expense between cost of revenues and selling, general and administrative expenses as well as the related income tax benefit were as follows for the three years ended December 31:

(in millions)	2021	2020	2019
Cost of revenues	$ 49	$ 51	$ 54
SG&A expenses	197	181	163
Total stock-based compensation expense	$ 246	$ 232	$ 217
Income tax benefit	$ 59	$ 48	$ 39

Restricted Stock Units and Performance Stock Units

We granted RSUs that vest proportionately in quarterly or annual installments over periods of up to three years to employees, including our executive officers. Stock-based compensation expense relating to RSUs is recognized on a straight-line basis over the requisite service period. A summary of the activity for RSUs granted under our stock-based compensation plans as of December 31, 2021 and changes during the year then ended is presented below:

	Number of Units (in millions)	Weighted Average Grant Date Fair Value (in dollars)
Unvested at January 1, 2021	4.4	$ 64.09
Granted	3.5	74.66
Vested	(3.0)	67.50
Forfeited	(1.0)	67.23
Unvested at December 31, 2021	3.9	$ 70.11

The weighted-average grant date fair value of RSUs granted in 2021, 2020 and 2019 was $74.66, $61.85 and $64.12, respectively. As of December 31, 2021, $233 million of total remaining unrecognized stock-based compensation cost related to RSUs is expected to be recognized over the weighted-average remaining requisite service period of 1.7 years.

We granted PSUs that vest over periods up to four years to employees, including our executive officers. The vesting of PSUs is contingent on meeting certain financial performance targets, market conditions and continued service. A summary of the activity for PSUs granted under our stock-based compensation plans as of December 31, 2021 and changes during the year then ended is presented below. The presentation reflects the number of PSUs at the maximum performance milestones.

	Number of Units (in millions)	Weighted Average Grant Date Fair Value (in dollars)
Unvested at January 1, 2021	1.7	$ 62.60
Granted	1.2	73.38
Vested	—	—
Forfeited	(0.5)	67.11
Adjustment at the conclusion of the performance measurement period	(0.1)	61.83
Unvested at December 31, 2021	2.3	$ 67.55

The weighted-average grant date fair value of PSUs granted in 2021, 2020 and 2019 was $73.38, $62.00 and $70.77, respectively. As of December 31, 2021, $41 million of the total remaining unrecognized stock-based compensation cost related to PSUs is expected to be recognized over the weighted-average remaining requisite service period of 1.6 years.

All RSUs and PSUs have dividend equivalent rights, which entitle holders to the same dividend value per share as holders of common stock. Dividend equivalent rights are subject to the same vesting and other terms and conditions as the corresponding unvested RSUs and PSUs and are accumulated and paid when the underlying shares vest.

The Purchase Plan provides for eligible employees to purchase shares of Class A common stock at a price of 90% of the lesser of: (a) the fair market value of a share of Class A common stock on the first date of the purchase period or (b) the fair market value of a share of Class A common stock on the last date of the purchase period. In December 2021, we amended the Purchase Plan to modify the purchase price for eligible employees to be equal to 95% of the fair market value per share of our Class A common stock on the last date of the purchase period. This change is effective for the first purchase period in 2022.

Stock-based compensation expense for the Purchase Plan is recognized over the vesting period of three months on a straight-line basis.

The fair values of the options granted under the Purchase Plan, were estimated at the date of grant during the years ended December 31, 2021, 2020, and 2019 based upon the following assumptions and were as follows:

	2021	2020	2019
Dividend yield	1.3 %	1.1 %	1.3 %
Weighted average volatility factor	27.5 %	35.9 %	24.9 %
Weighted average risk-free interest rate	0.03 %	0.6 %	2.2 %
Weighted average expected life (in years)	0.25	0.25	0.25
Weighted average grant date fair value	$ 11.72	$ 9.38	$ 9.82

During the year ended December 31, 2021, we issued 2.0 million shares of Class A common stock under the Purchase Plan with a total fair value of approximately $23 million.

Note 18 — Segment Information

Our reportable segments are:

- Financial Services, which consists of our banking and insurance operating segments;
- Healthcare, which consists of our healthcare and life sciences operating segments;
- Products and Resources, which consists of our retail and consumer goods; manufacturing, logistics, energy, and utilities; and travel and hospitality operating segments; and
- Communications, Media and Technology, which includes our communications and media operating segment and our technology operating segment.

Our client partners, account executives and client relationship managers are aligned in accordance with the specific industries they serve. Our chief operating decision maker evaluates the Company's performance and allocates resources based on segment revenues and operating profit. Segment operating profit is defined as income from operations before unallocated costs. Generally, operating expenses for each operating segment have similar characteristics and are subject to the same factors, pressures and challenges. However, the economic environment and its effects on industries served by our operating segments may affect revenues and operating expenses to differing degrees.

Expenses included in segment operating profit consist principally of direct selling and delivery costs (including stock-based compensation expense) as well as a per employee charge for use of our global delivery centers and infrastructure. Certain SG&A expenses, the excess or shortfall of incentive-based compensation for commercial and delivery employees as compared to target, restructuring costs, the 2020 COVID-19 Charges, costs related to the ransomware attack, the 2019 incremental accrual related to the India Defined Contribution Obligation, a portion of depreciation and amortization and the impact of the settlements of our cash flow hedges are not allocated to individual segments in internal management reports used by the chief operating decision maker. Accordingly, such expenses are excluded from segment operating profit and are included below as "unallocated costs" and adjusted against our total income from operations in the table below. Additionally, management has determined that it is not practical to allocate identifiable assets by segment, since such assets are used interchangeably among the segments.

For revenues by reportable segment and geographic area see Note 2.

Segment operating profits by reportable segment were as follows:

(in millions)	2021	2020	2019
Financial Services	$ 1,740	$ 1,449	$ 1,605
Healthcare	1,551	1,383	1,261
Products and Resources	1,325	1,078	1,028
Communications, Media and Technology	941	794	732
Total segment operating profit	5,557	4,704	4,626
Less: unallocated costs	2,731	2,590	2,173
Income from operations	$ 2,826	$ 2,114	$ 2,453

Geographic Area Information

Long-lived assets by geographic area are as follows:

(in millions)	2021	2020	2019
Long-lived Assets:(1)			
North America(2)	$ 377	$ 399	$ 445
Europe	75	88	104
Rest of World(3)	719	764	760
Total	$ 1,171	$ 1,251	$ 1,309

(1) Long-lived assets include property and equipment, net of accumulated depreciation and amortization.
(2) Substantially all relates to the United States.
(3) Substantially all relates to India.

Note 19 — Subsequent Events

Dividend

On January 31, 2022, our Board of Directors approved the Company's declaration of a $0.27 per share dividend with a record date of February 18, 2022 and a payment date of March 1, 2022.

Cognizant Technology Solutions Corporation

Valuation and Qualifying Accounts
For the Years Ended December 31, 2021, 2020 and 2019
(in millions)

Description	Balance at Beginning of Period	Charged to Costs and Expenses	Charged to Other Accounts	Deductions /Other	Balance at End of Period
			(in millions)		
Warranty accrual:					
2021	$ 32	$ 36	$ 3	$ 32	$ 39
2020	$ 33	$ 32	$ —	$ 33	$ 32
2019	$ 32	$ 33	$ —	$ 32	$ 33
Valuation allowance—deferred income tax assets:					
2021	$ 29	$ 17	$ —	$ —	$ 46
2020	$ 24	$ 5	$ —	$ —	$ 29
2019	$ 11	$ 15	$ —	$ 2	$ 24