TATA CONSULTANCY SERVICES

TATA

Innovating for Greater Futures

Integrated IFRS Annual Report 21 22

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About TCS

Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for over 50 years. TCS offers a consulting-led, cognitive powered, integrated portfolio of business, technology and engineering services and solutions. This is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has over 592,000 of the world's best-trained consultants in 55 countries. The company generated consolidated revenues of US $25.7 billion in the fiscal year ended March 31, 2022, and is listed on the BSE (formerly Bombay Stock Exchange) and the NSE (National Stock Exchange) in India.

TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit us at **www.tcs.com**.

Theme

This year's theme, **'Innovating for Greater Futures'** refers to the accelerated innovation witnessed in enterprises across the world, as they shift from improvising to cope with the challenges of the pandemic, to growth and transformation.

Accelerated adoption of the cloud is opening up all kinds of possibilities in product and business model innovation. Enterprises are seeking technology-led solutions to help realize their sustainability goals. The cloud is enabling boundaryless collaboration across industries, enabling innovative new offerings. Technology is at the heart of all this innovation, and clients are increasingly partnering with TCS to drive innovation at scale.

TCS has been innovating for greater futures too. Its investments in research and innovation, intellectual property, its worldwide network of Pace Port co-innovation hubs, and in building newer capabilities and acquiring contextual knowledge are helping win transformational business. Delivery model innovations such as its AI-powered Machine First approach, and platform-driven, outcome-based business models are helping clients reimagine their operations. All of these are helping the company drive holistic growth and create immense value for its stakeholders.

Recent Annual Report Themes

FY 2021
Building on Belief

FY 2020
Purpose-Driven. Resilient.Adaptable.

FY 2019
Growth and Transformation with Business 4.0™

FY 2018
Dawn of Business 4.0™

FY 2017
Reimagining the Enterprise

Board of **Directors**

From **left to right**

Keki M Mistry
C C M I

N G Subramaniam
COO
M M NE

Hanne Sorensen
M M I

Rajesh Gopinathan
CEO & MD
M M M NE

N Chandrasekaran
Chairman
C C M N

Aarthi Subramanian
M N

Dr Pradeep Kumar Khosla
C M I

Don Callahan
M M I

O P Bhatt
C M M I

Average Age (years)

61

51 — 71

Average Tenure on the Board (years)

06

03 — 15

Board Independence (%)

56%
Independent

44%
Non-Independent

Average Tenure of Independent Directors on the Board (years)

05

03 — 10

I Independent, Non-Executive Director

NE Non-Independent, Executive Director

N Non-Independent, Non-Executive Director

Board Committees C Chairman M Member

- Audit Committee
- Nomination and Remuneration Committee
- Stakeholders' Relationship Committee
- Corporate Social Responsibility Committee
- Executive Committee
- Risk Management Committee*

***Samir Seksaria (Chief Financial Officer)** is also a member of the Committee

Management Team

Corporate

Rajesh Gopinathan
Chief Executive Officer and Managing Director

N G Subramaniam
Chief Operating Officer and Executive Director

Samir Seksaria
Chief Financial Officer

Milind Lakkad
Chief Human Resources Officer

Rajashree R
Chief Marketing Officer

K Ananth Krishnan
Chief Technology Officer

Madhav Anchan
General Counsel Legal

Pradeep Manohar Gaitonde
Company Secretary

Business Heads

Susheel Vasudevan
Relationship Incubation Group

Krishnan Ramanujam
Enterprise Growth Group

Debashis Ghosh
Business Transformation Group

K Krithivasan
Banking, Financial Services and Insurance

Suresh Muthuswami
Chairman – TCS North America

Amit Bajaj
North America

Sapthagiri Chapalapalli
Europe

Amit Kapur
UK & Ireland

Letter from the **Chairman**

"The supply chain upheavals during the past couple of years are driving a shift towards rebalancing and resilience. As companies seek real-time data to transform their supply chains, AI and predictive analytics help capture insights and react to changing conditions. Your company is helping companies reconfigure their supply chains to ensure that they can serve their customers and stakeholders on time.

Dear Stakeholder,

The past couple of years have been a period of intense action and reflection. We have seen a global pandemic, geopolitical tensions, supply chain disruptions, the rise of cryptocurrency and many other public and private upheavals. As the dust settles, and a clearer picture of the world ahead emerges, I believe we are standing at the threshold of a period of great opportunity and growth.

In the face of widespread change, your company has shown remarkable resilience and adaptability, coming out stronger than ever, after catastrophic events like the global financial crisis or the pandemic.

In FY 2022, your company crossed a milestone of **$25 billion** in revenues, experiencing strong growth of **15.9%**, adding an all-time high incremental revenues of **$3.5 billion**. Even more satisfyingly, this growth has come with an industry-leading operating margin of **25.3%**. Since the start of the last decade, the company has grown over four times, comfortably outperforming its largest global competitors. This growth is the source of our energy and vibrancy, reflected in the **14.1%** growth in market value to **$182,760 million** in the past year.

The change in technology consumption reflects the prevailing trends in the economy. Recent events have accelerated digital adoption, put the spotlight on supply chain resilience and added urgency to the sustainability imperative. Each of these represents an opportunity that can contribute towards the growth of not just your company, but of the ecosystem as a whole.

Digital transformation is now an integral part of the functioning of enterprises, governments and societies. Your company continues to play a critical role in this transformation, helping clients embrace new technologies, initially to cope with the crisis, and since then, to innovate at scale and grow their businesses.

As a fitness enthusiast, I can tell you that the only way to transform in the long term is by strengthening one's core. It is no different for organizations. We work with large enterprises to simplify their technology landscape and strengthen their core by building a cloud-based digital foundation and embedding intelligent automation into their operations so they can focus on building memorable experiences for their customers.

Artificial intelligence and data are key differentiators for enterprises today. TCS helps its customers stay ahead of the game by investing in research and innovation, tapping the intellectual capital within the organization and also of our ecosystem through our Co-Innovation Network which includes leading academic institutions and start-ups working on cutting-edge technologies. Our insights and foresight are also crystallized in the form of AI-powered products and platforms that give customers actionable intelligence.

Another area that is a priority for me at the Tata group is sustainability and integrating that into business decision-making and business models. Your company is partnering with clients in taking up community initiatives jointly, in sharing best practices around diversity and inclusion, and importantly, in helping them achieve their sustainability objectives using technology. In addition to reducing its own carbon footprint in its journey to be net zero by 2030, your company is helping the world's largest corporations in developing and executing their sustainability roadmaps, deploying its portfolio of intellectual property and services to help them track their emissions, reduce their carbon footprint and get closer to their net zero goals.

The supply chain upheavals during the past couple of years are driving a shift towards rebalancing and resilience. As companies seek real-time data to transform their supply chains, AI and predictive analytics help capture insights and react to changing conditions—from widescale disruptions to individual customer complaints. Your company is helping

companies reconfigure their supply chains in many ways, including rolling out connected logistics to efficiently manage business disruption and ensure that they can serve their customers and stakeholders on time.

I strongly believe that technology is at its most transformational when combined with the strength of human capital. In FY 2022, our employee strength grew to **592,195** with a record net addition of **103,546** employees. You will be proud of the way your company supported its employees and their families in dealing with the pandemic, including organizing what was perhaps the largest vaccination drive in corporate India for employees and families of not just TCS, but also of its extended ecosystem of partners and other group companies.

In turn, our employees have shown remarkable resilience, loyalty and tenacity in ensuring that our customers are not impacted, despite significant personal challenges. I salute their spirit.

Our purpose is anchored in the well-being of all our stakeholders, and the communities we operate in are very important stakeholders for us. Drawing from the legacy of the Tata group, we work closely with our communities to create equitable, inclusive pathways for all, especially women, youth and marginalized groups.

We leverage four forms of capital - Intellectual, Technological, Human, and Financial - to bridge the opportunity gap for people and communities. Our primary focus areas are education, skilling, employment, and entrepreneurship. Additionally, we invest in basic health and wellness, water sanitation and hygiene, conservation, and disaster relief efforts.

Since 2015, your company has invested **$634 million** in its community initiatives and empowered millions of people globally, primarily underserved students, minorities, youth, women and elders, to be literate, healthy, educated, digitally skilled, become rural entrepreneurs and gain employment.

As we look ahead to the future, we go back to a key pillar of our strategy – customer centricity. Our organization structure, our investments in new capabilities and intellectual property, our delivery models and contracting structures have all been shaped by our clients' needs. Our new organization structure is designed to make every client continue to feel deeply valued, and to leverage TCS' rich set of capabilities and contextual knowledge to transform, grow and build better futures. With scale and by steadily expanding its transformation capabilities, TCS is moving from pursuing opportunities, to shaping those opportunities in the years ahead.

I look forward to sharing with you more milestones in this journey in the coming years. On behalf of the Board of Directors of Tata Consultancy Services, I want to thank you for your continued trust, confidence, and support.

Warm regards,

N Chandrasekaran
Chairman

Letter from the CEO

> Our new purpose-designed organization structure, along with continued investments in building newer capabilities, next generation delivery models and assets that help our clients innovate at scale, and in building our brand, will help us deepen our customer relationships, expand our addressable market, gain market share and power growth in the years ahead.

Dear Stakeholder,

With near normalcy all around, the pain and suffering caused by the pandemic at the start of the year seem so distant now. But the memories of TCSers and their loved ones we lost during the year will forever remain with us. My thoughts and prayers are with everyone who endured the loss of friends and family members to the pandemic.

Given that context, I am grateful that on the business front we have much to feel happy about and celebrate. It has been a highly satisfactory year of consistently strong, profitable growth. In dollar terms, our revenue was **$25.7 billion**, which is growth of **15.9%** (**15.4%** in constant currency).

Our profitability continues to be industry-leading, with the operating margin at **25.3%**, and net margin at **20%**. Our Earnings Per Share was at **$1.39**, growing **14.9%*** over the prior year.

Our cash conversion continues to be very strong, with a cash conversion ratio of **110.0%** and free cash flow of **$5,257 million**.

The Board has recommended a final dividend of **$0.29** for the year, bringing the total dividend for the year to **$0.56** per share. Additionally, during the year, we successfully completed our fourth buyback in five years, to the tune of **$2,362 million**, representing a total payout of **$5,023 million** including buyback tax of $554 million paid out in April 2022. This amounts to over **95.5%** of the free cash flow.

*Excluding provision towards legal claim in prior year.

Beyond the headline numbers, we are pleased with the holistic nature of the growth, broad-based across all our industry verticals and major markets, and with a steadily expanding number of growth and transformation engagements in the portfolio.

Growth was led by Retail and Consumer Business which was impacted the most during the pandemic and which has bounced back strongly, growing **19.2%**. Manufacturing grew **15.8%**, Banking, Financial Services and Insurance grew **13.6%** and Communications, Media and Technology grew **16.9%**. Life Sciences and Healthcare grew **19.8%** and Others which makes up **7.8%** of revenues grew **14.4%**.

All our major markets grew in the mid-teens or above. North America grew **17.9%**, Continental Europe grew **14.4%** and UK grew **17.6%**. Among emerging markets, Latin America grew **17.8%**, India grew **15.1%**, Middle East & Africa grew **14.9%** while Asia Pacific grew **6.2%**.

Innovating for Greater Futures

Our outstanding performance this year, and the strong demand for our services that drove it, can be traced back to the innovation that enterprises scrambled to adopt at the start of the pandemic, to engage with customers digitally and to improve their operational resilience.

The cloud adoption trends strengthened further in FY 2022, with more clients embarking on multi-horizon cloud transformation journeys . However, the mindsets have changed. During the year, enterprises moved from thinking of technology-led innovation as a way of coping with pandemic challenges, to looking at it as a means of powering their growth and transformation (G&T), especially in the case of clients who had already moved their most critical workloads to the cloud.

While G&T initiatives tend to be business focused and technology agnostic, immense possibilities for business transformation open up once enterprises move some of their workloads to the hyperscaler cloud. This is triggering a wave of business innovation in the form of Horizon Two or Horizon Three initiatives by our clients.

In FY 2022, we won deals addressing a broad gamut of G&T objectives such as M&A, newer ways of working, product innovation, business model innovation and innovations around improved customer experience. We have been providing examples of these in our recent annual reports, including this year's report.

A new trend this year was the growing volume of sustainability-related innovation, a good indicator how this has become a top priority item on most CEO agendas. We have leveraged our deep expertise in IoT, advanced analytics, and machine learning to come up with a suite of offerings in this space, including intellectual property such as Clever Energy™, IP2™ and TCS Envirozone™. Clients across industries such as retail, manufacturing, utilities and consumer goods are engaging us to develop innovative technology-led solutions to reduce energy consumption, or to measure and track green-house gas emissions across their end-to-end supply chain, reduce their carbon footprint, reduce waste and promote recycling.

We are very proud of the steadily expanding number of G&T deals in our order book because each such win represents market share gain for TCS from legacy consulting organizations which have traditionally dominated this space. It is an outcome of our sustained investments in creating enabling capabilities within the organization, be it in cultivating contextual knowledge, or research and innovation, building intellectual property, deepening digital expertise, cultivating technology partnerships and building our brand.

The growing component of G&T revenue in our portfolio is also evidence that our differentiated, inside-out approach to transformation is resonating well with our clients. Our collaborative ways, and focus on harnessing collective contextual knowledge results in better buy-in for the transformation from stakeholders across the organization, setting it up for success. Our brand statement, `Building on Belief', has also found strong resonance in the market, instilling hope into business and trust in the enterprise.

All-time High Order Book

All this is not to say that Horizon One spending, the investments that enterprises make at the start of their cloud journeys, while migrating to a new cloud-based

digital core, is coming to an end as a key demand driver. Far from it, we saw strong deal flow right through the year from Horizon One initiatives. The sheer scale, depth of consulting expertise and full-service capabilities of our dedicated business units on each of the three large hyperscalers, and the investments we have made in building a rich portfolio of accelerators and toolsets for automating application and data estate modernization and cloud migration give us a distinct edge in this opportunity.

Clients engaged us for some, or all, of the activities, starting from cloud assessment, business case preparation, roadmap creation, ERP consolidation and migration, application and data modernization and cloud migration. When core applications are re-engineered using cloud-native architectures, or on-premise ERP is moved to SaaS, it is not just a technology transformation but also a business transformation.

Such cloud transformation engagements are material, multi-year transformation engagements which when completed, result in resilient, future-ready digital technology stacks that enable leaner, more agile operations and very importantly, serve as a scalable foundation for their innovation and growth.

Partnering with our clients in this initial phase is important not only for the sheer volume of business involved, but also because it is a gateway to the unbounded opportunity that the downstream innovation and transformation represent. The granular contextual knowledge of our clients' business and technology landscapes, gained while executing Horizon One and other ADM programs, are critical for our ability to proactively pitch innovative ideas and solutions for their growth and transformation.

The other big demand driver was outsourcing of business and IT operations. There were three key reasons why enterprises outsourced more in FY 2022: the need to free up people as well as financial resources to execute their growth and transformation initiatives; talent scarcity especially in digital technologies, made worse by the Great Resignation; and the desire for leaner and more resilient IT and business operations. During the year, we saw many instances where clients engaged TCS to transform their operating models, and then manage those operations on their behalf.

Here too, our delivery model innovation, the Machine First™ approach, helped us win many large deals and gain share over pure play outsourcing companies. Our transformational approach embeds powerful technologies like machine vision, machine learning, and our AI-powered intellectual property such as ignio™ and Cognix™ into the core of our clients' processes, transforming the human-machine interface and delivering much leaner, faster and more resilient business and IT operations.

Throughout the year, these three trends – increased spend on innovation and transformation, cloud migration and outsourcing – drove a strong flow of deals of all sizes. The total contract value of deals signed in the first three quarters averaged between $7-8 billion per quarter, capped by an all-time high order book of **$11.3 billion** in the fourth quarter. The robustness of the deal flow at the close of the year becomes evident when even after excluding the two mega deals of roughly a billion dollars each won in Q4, the order book TCV in Q4 was $9.5 billion, which is also an all-time high. The full year order book was **$34.6 billion**, our highest ever, representing a book to bill ratio of 1.3.

New Benchmarks in People Management

Our purpose-driven approach to business and our values have shaped TCS' culture and work environment. We believe in investing in our people and giving them opportunities to realize their full potential. We believe in decentralized decision-making, in empowering leaders on the front lines, and in providing them all the support they need in their journeys. We also believe in treating the organization as an extended family, and standing by each member in their hour of need. This was best demonstrated in our response to the brutal second wave of the pandemic at the start of FY 2022. We scaled up our employee engagement, provided hospitalization support and access to Covid care centers at our facilities in 13 cities and undertook a massive – possibly the largest of its kind, pan-India vaccination drive, covering over a million individuals – employees and their dependents.

This philosophy, and our progressive policies and work culture have resulted in a very strong employer brand, validated by several third-party assessments and accolades during the year. This played an critical role in helping your company cope with the industry-wide supply side challenges during the year.

To support the strong growth momentum in FY 2022, we flexed the strength of that employer brand to set new benchmarks and cross new milestones in attracting and managing talent at scale across the world. Our workforce crossed the half-million mark in the first half of the year, and we ended the year with a headcount of **592,195**, an all-time high net addition of **103,546** employees.

The workforce remains a highly diverse one, with over **153 nationalities** represented. We crossed an important diversity milestone this year, with the number of women in the workforce exceeding **200,000**. We are also making progress, slowly but steadily, in improving gender diversity in the senior management ranks. Through focused leadership development programs, the number of women senior executives has grown 84% over the last 5 years, significantly higher than the male cohort.

Organic talent development continues to be a key focus area in our journey to be a G&T partner to more of our clients. TCSers collectively logged **60.3 million** learning hours and acquired over **3.5 million** digital competencies in FY 2022. Very importantly, the number of Contextual Masters in the organization crossed **50,000** this year, **24%** of them women.

The year also witnessed a sharp rise in employee turnover across the industry. TCS' attrition in IT services (LTM) was **17.4%** in FY 2022. Despite the increase, your company stood out with the lowest attrition in the industry and remained the benchmark for talent retention.

Community and planet

We continued to work with communities across the world, pursuing our long-standing commitment to programs in the areas of health, STEM education, skills development and the bridging of digital divides. These programs are scaling well in reach as well as depth of impact, touching the lives of over 1.7 million beneficiaries – women, youth and marginalized people.

To maximize the impact of our programs, we are now partnering with our customers in these initiatives. We engaged with 850 business leaders and teams, across 146 customer organizations and connected with over 50 government leaders on collaborative community efforts.

TCSers have also been quick to respond to the humanitarian tragedy in Ukraine, helping in rescue efforts, relief assistance, resilience support. To address the urgent needs of children, women, and those facing food insecurity, TCS is making a financial contribution of 1 million Euros to international humanitarian organizations like the UNICEF and the European Food Banks Federation which are helping support war refugees streaming into neighboring countries. We are also matching funds raised by employees, families, and their networks, up to 500,000 Euros, as donation to these two organizations.

On the environment front, we have good progress to report in our journey to become net zero by 2030 . Our absolute carbon footprint across Scope 1 and Scope 2 emissions reduced by **66%** over base year 2016 due to focused initiatives around energy efficiency and transition to renewable energy. We made a big leap on the latter, with use of renewable energy across TCS' global operations growing to **37.2%** of the total (15.6% in FY 2021).

Looking Ahead

Our all-time high order book, continued deal flow and pipeline velocity give us confidence in the sustainability of our business momentum. We are in the midst of a multi-year technology upgrade cycle that provides strong, structural growth drivers for the next few years.

The geo-political tensions in Europe and the resultant impact on global economic growth are real threats. However, the pandemic has shown us that enterprise spending on technology is far more resilient than most people credit it for. It is central to organizations' ability to innovate and differentiate in good times, and to survive and adapt in tough times. While

evolving market dynamics may prompt reprioritizing of programs, we are confident that technology spending itself will continue to grow. That growth and our expanding market share give us confidence of being able to sustain a certain base case growth, with room to maximize in better years.

At our current pace of growth, it is only a matter of time before we double our revenues and hit the $50 billion mark. In our journey to that next logical milestone, we are focused on not only our velocity, but also on ensuring we get there fighting fit, so it does not become a finish line to stumble across, but a launchpad to achieve even greater heights. For this to happen we are focusing on two things.

One, we want to arrive at that milestone with a more balanced portfolio, with a much larger proportion of business transformation revenues, so we have two equally strong growth engines for the journey ahead. For this, we want to build on our initial successes in the G&T opportunity, and put in place a structured way to deepen existing innovation and transformation engagements, while expanding the number of clients for whom we provide such services.

Second, as we get larger, we shouldn't lose sight of what has brought us thus far – our customer centricity. Our success stems from the fact that year after year, our clients reward us with more work, and rank us #1 in customer satisfaction across all the service providers they work with. Our approach of putting the client at the center of everything we do, making them feel special, and investing in newer capabilities to create value in newer areas of their businesses, has paid us rich dividends. Regardless of how large we get, we want to make sure that our customer focus never wavers, and every client continues to feel just as valued.

We have rolled out a new organization structure that will help us achieve these two imperatives. It retains the atomicity of our earlier architecture, and its three dimensions – industry verticals, horizontal service lines and geography-based sales. We have now added a fourth dimension, the stage of the customer's relationship journey with TCS.

That journey begins when a client first signs up for some initial work. When we successfully deliver, they give us more work and that is how the relationship starts growing. As trust levels steadily go up, they start viewing TCS as a strategic partner and consolidate more and more of their technology requirements with us. That is how we have steadily grown and deepened relationships with nearly 60 clients globally who spend more than $100 million on us annually.

We have rearranged existing units into three business groups, each aligned to a particular phase in the customer relationship journey: the **Relationship Incubation Group** that will provide the high-touch, high engagement, delivery-focused model that new clients require; the **Enterprise Growth Group** which will do what today's TCS does best, that is, pull together capabilities from across the different service lines to stitch together solutions that address our clients' business needs when the relationship is in its hyper growth phase; and the **Business Transformation Group** that will manage our largest clients and help them accomplish their growth and transformation objectives.

As clients progress in their relationship journeys, the account ownership will seamlessly transition from one group to the next, with all three groups working in synchrony to make sure that every client gets a curated experience and that we steadily progress every client relationship to the highest level of maturity with TCS being their preferred growth and transformation partner.

This new purpose-designed organization structure, along with continued investments in building newer capabilities, next generation delivery models and assets that help our clients innovate at scale, and in building our brand, will help us deepen our customer relationships, expand our addressable market, gain market share and power growth in the years ahead. We thank you for your continued support in this exciting journey ahead.

Warm regards,

Rajesh Gopinathan
Chief Executive Officer and Managing Director

The Year Gone By

Q4

Won a very large contract from **a Fortune 100 US company**, further expanding the long-standing partnership, to transform the technology at its global data centers into a future-ready, hybrid cloud stack for greater agility, flexibility, and improved operational resilience. TCS will also deploy a new cognitive-powered operating model to run that stack, to improve the availability of business applications and enhance user experience.

Selected by **Payments Canada**, the country's largest payment organization, to transform its payment system operations and help implement the Real-Time Rail (RTR), the new real-time payments system that will allow Canadians to initiate payments and receive irrevocable funds in seconds, 24/7/365. TCS will leverage its deep knowledge of the payments domain, and extensive experience in designing and implementing large payment systems for clients across the world to help Payments Canada create and execute an integration roadmap for the RTR.

Completed the fourth successful **share buyback** in five years, to the tune of **$2,362 million** at $59.45 per share, through the tender offer route, extinguishing 4 crore equity shares, representing 1.08% of the total paid-up equity share capital.

> With three decades of experience in delivering market infrastructure solutions, TCS will be a valuable partner in the delivery of the Real-Time Rail. Testing and deployment is a critical step in the introduction of the new real-time payment system and we're excited to work with TCS to execute on this next step for the RTR as we help shape the future of payments in Canada.
>
> **John Cowan,**
> Chief Technology & Operations Officer, Payments Canada

Announced a **new organization structure** designed to provide a curated experience to each customer depending on where they are in the customer relationship lifecycle journey. Leveraging TCS' large and deep bench of leadership talent, the new structure further deepens the customer-centricity that TCS was always known for, and is expected to help make TCS the preferred growth and transformation partner to more of its clientele.

Announced plans to grow operations in **New Jersey** by hiring nearly **1,000** more employees by the end-2023 to meet the strong demand for digital transformation. This follows a similar announcement earlier, to expand in **Arizona** by investing more than **$300 million** by 2026 and hiring over **220 employees** by 2023. In both states, TCS will also grow the reach of its STEM and computer science education programs, expanding teacher training and student programs.

Became the **#2 most valuable brand** in the IT services sector globally, according to Brand Finance, the world's leading brand valuation firm. According to the Brand Finance 2022 Global 500 IT Services Ranking report, TCS grew its brand value by **$1.8 billion (+12.5%)** year on year, to **$16.8 billion** in 2021.

Tata Group Chairperson and TCS Chairman, **N Chandrasekaran**, was conferred the **Padma Bhushan**, the third highest civilian award in India, for distinguished service of high order in the field of trade and industry.

Ranked **#1** in **Customer Satisfaction** in the largest survey of European businesses by Whitelane Research, for the ninth consecutive year, covering 1,800 CxOs from top IT spending companies in Europe. TCS' Overall Satisfaction Score was 84% with the lead over the nearest competitor expanding to 4 percentage points vs 1 percentage point in the prior year.

Named the new title sponsor and official IT services and technology consulting partner of the **Toronto Waterfront Marathon and Virtual Race** through November 2026. Additionally, TCS renewed its title and technology sponsorship of the **TCS New York City Marathon** through 2029, and became the new title and technology sponsor of the **TCS London Marathon** for six years starting 2022.

Selected by the Government of India to drive the second phase of the pathbreaking **Passport Seva Program**. TCS will refresh existing facilities and systems, develop new solutions to enable issuance of e-passports and further enhance the citizen experience. In the first phase launched in 2008, TCS transformed the citizen experience at its nationwide network of Passport Seva centers. Setting global benchmarks in service quality, timeliness, transparency, and reliability, the Passport Seva program became an icon of Digital India and a source of national pride.

Recognized as a **Superbrand** in Singapore for the first time, following recognition as a **UK Superbrand** for the seventh consecutive year. The latter acknowledges the company's exceptional business growth, its position as the top strategic IT player by revenue in the UK, its number one ranking in customer satisfaction, and its community initiatives.

Launched **TCS' Cyber Defense Suite**—a comprehensive set of modular, quickly deployable cyber security services offered on a platform. Augmenting the 10,000 cyber-specialists and global network of Threat Management Centers that TCS uses to secure its customers globally, the new platform provides 360-degree visibility and predictive intelligence to proactively defend and respond against evolving threats.

Became **title partner** to Jaguar Racing ahead of the 2021/22 ABB FIA Formula E World Championship. The team will now be known as **Jaguar TCS Racing**. TCS will leverage its leadership in technology transformation and partnerships across the EV value chain to help Jaguar TCS Racing become a catalyst for electrification, promote low carbon emissions and sustainable mobility.

Q3

Celebrated a milestone with the number of women in the workforce crossing **200,000** in December. Women-centric leadership development initiatives have resulted in the number of senior women executives growing 84% over the last 5 years. The company is part of the **2022 Bloomberg Gender-Equality Index** that tracks the performance of public companies committed to transparency in gender-data reporting.

Launched the **TCS Assessment and Migration Factory**, a set of tools, accelerators, and services that enable customers to shift their mainframe workloads to the new **AWS Mainframe Modernization platform.**

Q2

Gained further market share in the UK, and was ranked **#1 by revenue** in the UK Software and IT Services Rankings 2021 by TechMarketView. The company performed very well in the rankings by sub-category as well, topping the Applications Operations category, and ranking #3 in Consulting and Solutions.

Launched **`Rebegin'**, an initiative to enable experienced women professionals who had taken a work sabbatical due to family commitments, to reclaim their careers and pursue their professional aspirations in TCS. Over 14,000 job applications were received under this initiative in FY 2022.

Launched **TCS Google Garages** at the TCS Pace Port™ co-innovation centers in Amsterdam, New York and Tokyo. These Garages provide an immersive experience for companies to evaluate TCS' cloud solutions, develop and prototype applications, apply analytics and artificial intelligence (AI) capabilities using design thinking and agile development to rapidly address business opportunities and create value using Google Cloud.

Partnered with the **Australian Energy Market Operator (AEMO)** to implement the switch from 30-minute settlement to 5-minute settlement in the national wholesale electricity spot market. The shorter settlement window, enabled by a cloud-based solution designed by TCS, is expected to provide a better price signal for investment in faster response technologies, such as batteries and gas peaking generators.

Continued to be the preferred transformation partner to market infrastructure institutions, with **TCS BaNCS for Market Infrastructure and Custody** solutions powering the operations of over 50 market-critical institutions across 66 countries.

*Entered into a new partnership with **Dutch Open**, one of Europe's most innovative and sustainable golf events. TCS will leverage its expertise in digital technologies to help the Dutch Open enrich participant and spectator experience.*

Selected by the **Multi-Commodity Exchange India Ltd (MCX)** as its technology partner for Project Udaan. TCS will help MCX build a new technology core, transforming its trading as well as post-trade functions, to support its future growth and further strengthen its leadership position in the commodity derivatives market in India.

The investments in innovation and strong market traction demonstrated by TCS' cloud units won several partner awards. TCS was named to the **Microsoft Business Applications 2021/2022 Inner Circle**, and also awarded two **2021 Microsoft Partner of the Year** Awards. Similarly, TCS was named the **2020 Google Cloud Breakthrough Partner of the Year** for outstanding results across sales, delivery, competency development, expertise, specialization badges, and growth of its customer base.

Q1

Inaugurated **TCS Pace Port™ Amsterdam**, a co-innovation and advanced research center where TCS teams will co-innovate with European customers, drawing on an ecosystem of partners from academia, government institutions, start-ups and technology providers. The center will enable ideation and rapid prototyping with a clear focus on finding and creating sustainable solutions.

The ninth season of **TCS CodeVita** attracted **136,054** participants from **34** countries, winning it a **Guinness World Records™ title** at the world's largest computer programming competition. College students from around the world competed in solving complex programming challenges over an intense six-hour period, to win cash prizes and be ranked among the top student programmers globally.

Samir Seksaria took over as the company's **Chief Financial Officer** on May 1, 2021, following the retirement of V Ramakrishnan (`Ramki'). He started his career in TCS in 1999. He moved to Corporate Finance in 2004 and played a critical role in the company's IPO. Prior to becoming CFO, he headed the financial analytics, planning and business finance functions. On November 1, 2021, **Pradeep Manohar Gaitonde** stepped in as the **Company Secretary** in place of Rajendra Moholkar who retired.

Launched a **pan-India vaccination drive** against Covid-19, covering TCSers and their families, across all TCS locations as well as smaller cities that some employees were remote-working from. The TCS Vaccination League benefited 1.2 million individuals and resulted in over 87% of employees in India getting fully vaccinated and 95% receiving at least one dose.

TCS' Integrated Business Model

for **Value Creation** using the **Five Capitals**

Financial Capital

The 25-fold revenue growth over the last 20 years is a testimony to the strength of our business model and our ability to reinvent ourselves in an ever-evolving technology landscape to stay relevant to our customers while remaining focused on creating value for all our stakeholders.

Outcomes

- Best in class profitability and strong balance sheet provide greater ability to invest in newer capabilities and to weather economic downturns, macro uncertainties
- Consistently high shareholder returns enhances social and relationship capital

Economic Value Generated and Distributed

$25,707 mn
+15.9%
Economic value generated

Economic Value Distributed

$14,419 mn **+16.3%** Employee cost	**$4,792 mn** **+18.7%*** Other cost of operations	**$1,775 mn** **+14.6%*** Tax expense
$115 mn **+15.2%** Community Investments	**$300 mn** **+16.1%** R&D and innovation including innovation center development	**$5,023 mn** **+9.1%** Shareholder payout including unpaid final dividend, Buyback and taxes

* Excluding provision towards legal claim in prior year

Financial Highlights

Revenue Trend

CAGR 7.9%

($ million)

Operating Profit Trend

($ million) Operating Profit Operating Margin

Earnings per share ^

CAGR 7.0%

(Amount in $) ^ Earnings per share is adjusted for bonus issue

OCF and Cash Conversion

($ million) Operating Cash Flow (OCF) OCF to Net Profit Ratio

Cash Usage#

Cash usage for the period FY 2018 to FY 2022

Shareholder Payouts

Dividend Special Dividend Buyback including tax Shareholder Payout ratio (Including special dividend and buyback, including tax)

($ million) # includes proposed final dividend

* Excluding provision towards legal claim

Human Capital

Best in Class Talent Management

592,195
Employees

Workforce
Globally distributed highly localized

103,546
Employees

Net Addition
Highest ever

17.4%
LTM attrition in IT services

Talent Retention
Best in the Industry

Talent Diversity and Inclusion

PASS

153
Nationalities

3 Generations
88% Millennials

210,000+ Women
35.6% of workforce
84%+ Increase in senior women executives over last 5 years
678 Women patent holders

Rebegin

New program for women seeking to rejoin work after a career break

14,000
job applications received

Rising up the ranks

% Women improved at mid- and senior levels over last 5 years

TCS Employees by Region, Age and Gender

Talent Development

TCS takes a purpose-centric approach to learning and development that leverages horizontal collaboration and the abundance of internal talent in an ecosystem where the training is just-in-time, just-for-me and just-enough.

3.5 million
Digital competencies acquired

171,000
Employees deep skilled

Average Learning Hours per employee 121 hrs

TCS Elevate
Linking learning to career growth

13,000
Employees identified as high talent, with higher pay

Contextual Masters
Talent with potential to be tomorrow's G&T leaders

50,000 CMs
+169% YoY
24% Women

Fresher Training
Xplore foundational virtual training with certifications, daily webinars, weekly assessments and gamified contests

100,000+
trainees onboarded.
The highest ever

Intellectual Capital

The company channelizes its research and innovation efforts and outcomes towards building better futures through two external facing brands:

- **TCS Research** produces foundational inventions that impact industry and society.
- **TCS Pace™** brings the best of TCS' intellectual content, innovation assets, capabilities, and practices to clients.

Highlights:

Four dimensions of TCS' Research and Innovation:

Innovation in the Core Business:

Continuous creation of innovative new solutions in the core business, delivering incremental benefits using existing capabilities in areas like cloud, code, data and cybersecurity. Also includes newer functionality in existing products and platforms, or their replatforming onto hyperscaler clouds. Eg: TCS Mastercraft™, Jile™ 4.0, TCS BaNCS Marketplace

Technology-led innovation

Use of emerging technologies to enable seamless human-machine collaboration and transform the client's way of doing business. Eg: Algo Retail suite (TCS Optumera™, TCS OptuniqueTM and TCS Omnistore™), TCS ADD™, TCS TwinX™, Sustainability solutions (TCS Clever Energy™ and TCS Envirozone™), Quartz™

Business and Ecosystem-led Innovation

Leverage of domain and contextual knowledge, research outcomes and TCS COIN to connect ecosystems and transform industries. Eg: TCS Cognitive Plant Operations Adviser (CPOA), TCS' DeXAM, TCS Aviana™, TCS HOBS ™

Blue Sky Innovation

Long-term investments in futuristic areas of research to address customers' needs that are not yet realized. Includes: cognitive robotics; quantum computing; next-generation communications technologies. Other research topics include sensing, digital twins for social systems, efficient and robust AI & deep learning, metagenomics, immersive technologies, sustainability, generative design for materials, manufacturing & life sciences, and personalized nutrition and medicine.

TCS Suite of Products and Platforms

tcs BaNCS

- 22 new wins (50% of the new wins were on TCS BaNCS Cloud) and 16 go lives in FY 2022
- Highlights:
  - Services more than 35% of the world's banking population
  - More than 100 million transactions run on TCS BaNCS Cloud daily
  - Records 10 million new trades per day (peak) across 100+ countries
  - Offers ready market connectivity to 45+ local markets for settlements
  - Services over 20 million life, annuity and pension policies and 135 million property and casualty policies across the globe

ignio

- World leading cognitive automation software for IT and business operations
- 100+ deals closed in FY 2022, 27 new customers went live
- 11,500+ ignio trained professionals, 4,100+ ignio certified professionals till date
- 35 patents granted to date

tcs iON

- Onboarded 700+ corporates to enable job outcome linkage through TCS NQT
- Conducted ~45 million in-center and ~2.9 million remote assessments at national and regional scale
- 110+ new wins in India and 15 in international market
- Launched 250+ learning offerings (NQT variants, Certifications/Courses, Games), in latest tech. domains such as AI/ML, Big data, Data Mining/Analytics; banking & finance domain and in manufacturing sector in partnership with NTTF, ICA, and Tata Strive
- Highlights:
  - 268 million candidates assessed till date; largest in-center assessment with 18.9 million candidates
  - 36.5 million remote assessments done
  - 10.4 million learners on the platform, 79,801 courses available, 909 clients
  - ERP on cloud: 896 clients in manufacturing
  - 136 patents filed till date; 37 granted

tcs ADD

Digital Advantage for Life Sciences

- Comprehensive suite for digital transformation of drug development and clinical trials
- Clients include 10 of the Top 12 global pharma companies; total number of clients: 19
- 700+ clinical trials supported by TCS ADD Platforms till date, Implemented across 50,000+ sites across the world.
- 3 new wins and 1 go live in FY 2022

tcs HOBS™

- Plug and play SaaS based business platform to digitally transform business, network and revenue management domains of subscription-based businesses
- 2 deal wins in FY 2022

tcs Optumera

- AI and ML powered merchandise optimization platform that enables retailers to unlock exponential value by optimizing their space, mix and price in an integrated manner.
- 1 new win and 3 go-lives in FY 2022

tcs TwinX™

- AI powered system of actionable intelligence – powered by an enterprise digital twin (customer, product, process) to help business leaders simulate and optimise enterprise decisions, predict and proactively manage outcomes
- 20 new wins and 9 go-lives in FY 2022
- TwinX Business Highlights:
- Risk Free Experimentation Users: 5000+
- Number of End- Customer Orders Processed: 33 Mn
- Number of Digital Twin transactions: 10 Mn
- New Product Ideations: 20
- Safety Twin ensures zero harm workplace/ saves precious human lives in hazardous anufacturing facilities
- Launched in Google Cloud in Oct 21

tcs OmniStore™

- AI powered unified commerce platform that can flexibly orchestrate unified omnichannel customer journeys and help businesses roll out new services and apps quickly without having to worry about channel constraints. It can serve diverse lines of business – general merchandise, discount, specialty, fashion, restaurant, post office, telecom, and travel and hospitality industries.
- 3 new wins and 5 go-lives in FY 2022

tcs MasterCraft™

- Digital platform to optimally automate and manage IT processes
- FY 2022 Highlights: 46 billion records processed for data privacy, 8.2+ billion Records processed for data quality, 8.8+ million lines of code (mloc) analyzed, thus helping clients get the right insights from legacy code and automate the business rules extraction with an overall productivity improvement of 20% - 30%, 3.4+ mloc of high-quality Java and JavaScript codes generated, resulting in 50% more productivity in development
- 27 new wins in FY 2022

jile

- SaaS-based, scalable Agile DevOps platform to accelerate software development and delivery and integrate DevOps tools
- 13,000+ active users till date

QUARTZ

- Intelligent smart contract development toolkits, Integration solutions and 'Designed for DLT' business solutions that provides foundational technology, tools and business components for creating distributed ledger solutions across varied industries
- Built on the core principles of co-existence, integration and interoperability. Quartz enables existing systems to coexist and integrate with blockchain platforms and other messaging networks
- 7 new wins in FY 2022

Social Good

TCS Research collaborated with **Prayas Help Group** to develop a digital twin of Pune city to predict the spread of the pandemic and help devise local strategies to control it.

TCS' inventors and innovators continued to mentor young social entrepreneurs as part of TCS Foundation's **Digital Impact Square (DISQ)**. Over 30 start-ups are currently under various phases of incubation and graduation under DISQ. Prominent themes around which social challenges are being addressed include AgriTech, Assistive Tech, Citizen Services Tech, EduTech, HealthTech and Sustainability Tech.

A number of assistive technologies have emerged from TCS R&I, including Assisto (speech aid for cerebral palsy); VHAB (Immersive Physio); Verbose (Speech-to-text); School at Home assistance for disabled; Emotrain (Training for Autistic) and Home Bound (COVID related remote medical assistance). These were especially useful during the pandemic, where much of the training and support for children with special needs had to be virtual.

Relationship and **Social Capital**

TCS' business model and strategy have resulted in deep and enduring customer relationships, a vibrant and engaged workforce, a steady expansion of its addressable market, a strong reputation as a responsible corporate citizen and a proven track record in delivering longer term stakeholder value. All of this has significantly enhanced the company's brand value, which is a quantifiable measure of its social and relationship capital with stakeholders.

Customers

Customer-centricity is at the core of TCS' business model, organization structure and investment decisions. The philosophy has been to delight them by delivering superior outcomes, and build strong, enduring relationships. Additionally, the company seeks to expand and deepen customer engagements by continually looking for new areas in the customer's business where the company can add value, proactively investing in building newer capabilities, and launching new services and solutions.

Outcomes

- Expanding participation across broad range of stakeholders across the enterprise including business heads, CMOs, CROs, COOs, CFOs and even CEOs
- Continual expansion of customer relationships in terms of services consumed
- Highly satisfied customers

Investors

TCS is seen as a benchmark in its outreach to investors, its transparency and disclosures, publicly communicating its longer-term strategy, qualitative aspects of the demand outlook, risks and opportunities, reducing information asymmetries and enabling fair valuation of the stock. For the last many years, it has been awarded the Best Investor Relations award by publications like Institutional Investor, FinanceAsia and AsiaMoney based on polls of investors and analysts in the region.

Investor and Analyst Interactions in FY2022

Particulars	Q1	Q2	Q3	Q4	FY 2022
Total interactions	152	275	243	186	**856**
Total number of hours spent	45	53	42	34	**174**

Analyst Relations

Branding

TCS' reputation for customer-centricity, domain depth and execution excellence have made it the preferred growth and transformation partner to leading corporations across the world. It is also recognized as a top employer brand across the major markets it operates in, including North America, Europe, UK, India, Latin America and Australia, among others.

Its tagline `Building on Belief' along with marketing campaigns, sponsored events and advertising, along with the goodwill built up with investors, with local communities, academia and other stakeholders have cumulatively helped put TCS among the Top 2 brands in IT services by brand value according to Brand Finance.

Source: Brand Finance

Awards & Recognition

TCS rose to be the second most

Valuable IT Services Brand

Brand Finance Awards

Jaguar TCS Racing 2022

TCS Toronto Waterfront Marathon 2022

TCS Europe Summit 2022

#1 IN CUSTOMER SATISFACTION 2020/21 EUROPE

LinkedIn TOP 2022 COMPANIES

top EMPLOYER NORTH AMERICA 2021

top EMPLOYER GLOBAL 2020

ASIA'S OUTSTANDING COMPANIES POLL 2020 ASIAMONEY

CIO 100 WINNERS 2020

STEVIES 2020

FinanceAsia ASIA'S BEST COMPANIES 2020

DIGITAL IMPACT AWARDS WINNER

HR AWARDS 2020

FTSE4Good

KANTAR BRANDZ 2021 MOST VALUABLE GLOBAL BRANDS

AWARDED Superbrands BRITAIN'S CHOICE 2020

AWARDED Superbrands AMERICA'S CHOICE 2020

2022 Brand Finance Awards TOP 2 MOST VALUABLE IT SERVICES

Natural Capital

TCS is in a unique position to combine its heritage of purpose along with digital leadership and innovation to drive its own journey to more sustainable outcomes, as well as partner with customers, civil society and governments to lead and shape solutions towards the achievement of the UN Sustainable Development Goals.

Energy Management and GHG Emissions Reduction

Target: 70% reduction of Scope 1 + 2 emissions by 2025 (vs base year 2016) and **Net Zero** by 2030

- Prioritized energy optimization and carbon footprint mitigation.
- 89% of emissions across Scope 1 and Scope 2 due to purchased electricity for office blocks.
- Use of Clever Energy to optimize energy consumption and greater use of renewable energy.
- 5 large campuses in India certified with ISO 50001: 2018 standards for Energy Management Systems (EnMS).

Achievements

64.4%	1.65 PUE	10.2 MW	37.2%
% Total office space (for India) as per IGBC standards	Energy efficiency initiatives at TCS data centers in Mumbai and Chennai	Rooftop solar capacity across campuses	Renewable electricity as % of total electricity consumed

Outcomes

Scope 3 emissions

Employee commutes and business travel cause **~50%** of these value chain emissions. Remote working and reduced business travel resulted in a sharp reduction.

Water Conservation

Target: 3% YoY reduction in freshwater consumption across owned campuses

Initiatives include conservation, sewage treatment & reuse, rainwater harvesting (RWH) and employee awareness. All new campuses have been designed for 50% higher water efficiency, 100% treatment and recycling of sewage, and rainwater harvesting.

1.44 Bn	5.2%	84%
Liters of fresh water consumed in FY 2022	Water from RWH; 86.4 % from third party sources; 8.4% from ground water	Recycling of sewage generated (for India)

Waste Reduction & Reuse

Target: Reduction in waste generation, maximizing recycling/ reuse to divert waste sent to landfill

100%	Recycling of regulated wastes, e-waste, printer cartridges, paper, packaging and plastics.

Biodiversity conservation and enhancement initiatives within TCS campuses.

Partnering with Takeda to Innovate at Scale

Takeda, the global biopharmaceutical giant, is on a digital transformation journey to innovatively use technology to create better experiences and outcomes for patients, providers and payers. This means innovating continuously on not only in core drug development but also in behind-the-scenes areas such as manufacturing, procurement, shipping and distribution, to make sure that Takeda's life-saving therapies reach more patients, faster.

Takeda partnered with TCS to develop an agile model that would enable the creation of new digital assets in a rapid and repeatable fashion. Leveraging TCS Pace™, a philosophy and framework for innovation at scale, TCS helped Takeda envisage an innovation factory delivery model called Enhanced Digital Global Experience (EDGE).

Departing from the traditional business analysis and design-build-test linear project life cycle, EDGE embraces co-creation, cross-functional collaboration, and continuous business-driven iterative innovation. Leveraging cloud technologies, design thinking, and location independent agile software development to provide an end-to-end product development capability, TCS is helping Takeda transform the way it launches digital products and services across its operations. A few examples:

- TCS helped build a drug substance optimization solution that uses machine learning to help supply planners optimally allocate the raw materials for drug production, leading to a reduction in raw material scrappage and an additional amount of doses produced annually.
- A mobile track-and-trace app was built to provide real-time visibility of product consignments for a newly launched product with a very short shelf life.
- A product was developed to help decision makers evaluate various transportation and shipping scenarios to optimize on time and cost of shipments while reducing carbon impact.
- A controlled substance control tower was built to provide a single view of permits and visualization of risks associated with the global movement of controlled substance drug products.

By partnering with TCS to scale up its innovation efforts using BizDevOps, Takeda has accomplished much in the short time since EDGE was implemented. The new innovation factory has released 12 products across over 40 design sprints at the peak of the pandemic, evaluated over 40 potential use cases and reduced the time-to-market for new digital products and services by 50% - a benchmark for organizations looking to embrace innovation at scale.

> We have developed a deep partnership with TCS to set up and run an innovation factory that's developing digital products and services across Takeda. This model centralizes domain expertise, design thinking and lean agile product development as part of an end-to-end capability that is driving digital transformation across our global supply chain. TCS is helping us embrace innovation at scale, and use the power of emerging technologies to transform our business.
>
> **Hansjoerg Magalhaes**
> Global Product Manager
> ERP Commercial and Supply, Takeda

Co-Innovating with Bovemij to Fulfill its Mission and Drive Growth

For the last 60 years, Bovemij has been providing a variety of insurance services such as auto, fire, legal assistance, financing and other business services to mobility companies – vehicle dealerships, fleet owners, and service centers – in the Netherlands to help them compete successfully in the marketplace.

To keep fulfilling its mission of helping this ecosystem stay competitive in a digital world, Bovemij partnered with TCS to realize its digital strategy to expand the ecosystem and bring in a richer set of offerings that ecosystem participants could use to connect better with digital native consumers.

TCS leveraged its Pace Innovation Architecture and Pace sprints to jointly ideate and create unique, viable and feasible business propositions for the ecosystem which would be offered through a new Digital Mobility Platform that would connect Bovemij's mobility partners with consumers in a B2B2C model across the Netherlands.

TCS also set up a digital innovation factory, for repeatable agile innovation at scale, to take each of the business propositions and deliver them to market at speed. A minimum viable product was put together in six weeks, with relevant user stories to demonstrate outcomes and gain acceptance of internal and external stakeholders.

In addition to providing access to its full set of offerings to its regular B2B partners, Bovemij's new cloud-based Digital Mobility Platform is also enabling new B2C propositions – offered on a subscription basis – for its partners, to sell better to consumers while embedding its insurance and other offerings into those transactions. Other propositions seek to benefit the ecosystem as a whole. For example, consumers can sell their used cars on its portal, which mobility companies can bid for. Data from these consumer interactions are being harvested for further actionable insights for use by Bovemij's various business lines and other ecosystem partners.

Co-innovating with TCS is enabling Bovemij leverage the power of the ecosystem to offer innovative propositions to its partners and their consumers, carve out a new brand identity for itself in the market, create new revenue streams and drive growth.

> Bovemij is committed to help the mobility ecosystem thrive in the digital world. We selected TCS as our partner to help us realize our digital strategy because of the co-innovation architecture and agile practices that they already had in place. Using that, we could jointly visualize the platform and the various business propositions, and rapidly build out each such proposition. Their expertise, creative ideas and agile ways helped us get our platform up and running much faster than we had anticipated.
>
> **Marcel van de Lustgraaf**
> Member of the Executive Board
> Bovemij

INNOVATING FOR GREATER FUTURES:
A PANEL DISCUSSION

Why are enterprises accelerating their investments in innovation? How does TCS help enterprises innovate for greater futures?

Ananth: The initial trigger for this acceleration was the need to build resilience into the technology and business context of every enterprise. The next trigger was the adaptation required to compete in many contexts created by digital business models. Finally, as enterprises are moving into a post-pandemic world of new risks, challenges and opportunities, a more strategic, purpose driven strategy is driving innovation.

These factors are driving enterprises to develop a wide and deep innovation capability, which can scale. This is not easy. Most have found it difficult to measure up on both scale and speed. Smaller competitors may offer a non-stop stream of innovations. Large enterprises often struggle to innovate at that pace on their own, for lack of processes, toolsets and also sufficient dedicated bandwidth

Partnering with TCS can help them overcome all these issues. We help them create a strategic agenda using our tools and methods, especially our 'Clay Map', named so in honor of the late Clayton Christensen who greatly influenced our thinking on innovation. We also offer the TCS' Agile Innovation Cloud, a framework for operationalizing innovation at scale, which ensures that innovation does not happen by chance but by design. It brings together the best of TCS' innovation, global capabilities, ecosystem partnerships, and talent to help our clients define their strategy, create an innovation portfolio and scale the execution of innovation.

Our clients tap into our contextual knowledge of their business and technology landscapes, when they jointly ideate with our teams. They work with our start-up and academic partners at our Pace Ports™ to harvest many more innovation candidates than on their own. We then jointly design and build 'minimum viable products' of the most promising ideas in Agile 'Pace Sprints'. At a larger level, we help clients create a

Featuring

K Ananth Krishnan
Chief Technology Officer

N G Subramaniam
Chief Operating Officer

Krishnan Ramanujam
Global Head – Enterprise Growth Group

repeatable process which can significantly scale up and speed up their innovation.

A good example of this is the innovation factory we have set up for Takeda[1] . Using cloud, design thinking, and location independent agile methods, our combined teams are taking up innovative ideas across procurement, logistics and finance, and building innovative digital assets at twice the velocity.

Krishnan: The three broad themes around which we saw our clients innovate the most were growth and transformation (G&T), resilience, and sustainability. We have been making significant investments in creating capabilities strategically relevant to each of these themes, some of which we have described in our prior years' annual reports as well.

G&T is most often about expanding organically or inorganically into adjacencies, be it of products and services, or customers and markets, and occasionally, moonshots. Good examples are our transformational engagements with clients like Swiss Re, Bovemij and RS Components described in our FY 2022 annual report[2], or the work we have done for Bayer, Damen Shipyards and Toyo Tires described in prior years' annual reports.

We have been leveraging our deep contextual knowledge of our clients' businesses, extensive industry knowledge and experience, our rich portfolio of intellectual property, digital engineering expertise and our differentiated inside-out approach to transformation to help bring their G&T visions to fruition.

Underpinning our work in G&T are our key innovation pillars – our Pace Ports™, the TCS Co-innovation Network (TCS COIN™), research collaborations with leading academic institutions, `Future of Business' frameworks, W12 design studios, and our products and platforms like TCS BaNCS™, Optumera™, Optunique™, ADD, ignio™, Bringing Life to Things™, Cloudonomy™, and Cognix™ among others.

The second big theme is resilience, which is the ability to weather foreseen as well as unforeseen emergencies. In these last two years, many of our largest deal wins were around transforming clients' IT and business operating models, and their supply chain management processes, using ignio or TCS Cognix to embed intelligent automation for greater resilience and agility. Much of the rush to embrace the cloud in the early months of the pandemic was also driven by this need.

Lastly, we saw clients focus heavily on sustainability in FY 2022, particularly around carbon footprint reduction. Our investments in innovative digital solutions such as Envirozone™, Clever Energy™ and IP2™, and our expertise in cloud, data and analytics, AI and ML are helping us win more and more of such engagements, helping us amplify our contribution to the worldwide collective effort to mitigate climate change and build greater futures.

What we have observed is that as soon as enterprises simplify their IT landscapes and build a new, cloud-based digital core, supporting micro services in a cloud native environment, their ability to realize innovative ideas and deploy them in production shoots up.

Aren't large enterprises also constrained by their legacy technology stacks? How do they overcome that challenge?

NGS: I call them heritage. They have been around and doing a good job of running their businesses in a way that encapsulates their organization's processes, checks and balances. Most organizations have worked to build APIs or middleware that enable their digital strategies, though they are suboptimal.

What we have observed is that as soon as enterprises simplify their IT landscapes and build a new, cloud-based digital core, supporting micro services in a cloud native environment, their ability to realize innovative ideas and deploy them in production shoots up. They are able to anchor or participate in ecosystems at will, which drives growth and innovation.

[1] Page 33, [2] Pages 41, 34 and 45 respectively

You may recall the scalable, customer-centric digital operating model we built for the Phoenix Group, using TCS BaNCS[3] . Our platform is extensible, supporting the required APIs and microservices for them to leverage fintechs and our TCS COIN partners to enable the differentiation in the front.

Krishnan: We see this same dynamic with the broader set of clients who undertake Horizon One cloud transformations. Besides enhanced ability to integrate innovative new solutions into the core, their appetite for innovation itself goes up. The richness of the technology capabilities built into today's hyperscaler clouds triggers more innovative thinking and the desire to experiment with those powerful technologies to reimagine different aspects of the business.

Another challenge that large enterprises face is the need to invest for the longer-term growth of their businesses, without disrupting near-term financials. TCS helps them square this circle by providing a line of sight for funding the innovation pipeline or the transformation by helping optimize operations.

We work closely with the client to reimagine parts of their IT and business operations, or perhaps their IT infrastructure, using our Machine First™ approach. The resultant operating models are leaner, more agile and more responsive. This frees up inhouse talent to take up the more exciting innovation and transformation initiatives. One large US client of ours for whom we are building a new, cloud-native digital platform to support their business forays into adjacencies, calls it their `save to invest' strategy.

How do you see clients' transition from Horizon One to Horizon Two spending affect your growth? Will there be a slump and subsequent recovery?

Krishnan: The term multi-horizon may suggest clearly delineated, sequential phases but in reality, clients don't wait to complete Horizon One, that is, migration of all their workloads to the cloud before commencing their Horizon Two initiatives. These progress concurrently.

Even as existing workloads are migrated to the cloud, newer cloud-native systems are built to enhance customer experience or to drive product or business model innovation. That is how we have been able to give examples of G&T engagements being executed as part of Horizon Two investments in our quarterly earnings calls, even though we are still in the middle of the Horizon One opportunity.

We expect the transition to be a seamless one. Horizon One is a bounded opportunity and will plateau at some point when most of the workloads are migrated. By that time, the other two horizons, which are boundless opportunities would have scaled up and will support our future growth. All our investments into building our G&T capabilities, our branding and the new organization structure are geared to help us maximize our participation at that point.

In the last couple of years, the industry has seen deal sizes reducing. What is driving that?

Is that why smaller companies are growing faster? Also, is that why you adopted a new organization structure?

NGS: Our order book has had a good mix of small and medium projects, as well as large outsourcing and transformation deals in FY 2022. This mix is important for our short and long term business growth. Projects are increasingly executed using Agile methods. The focus here is to deliver 'speed to value' by structuring the program over multiple monthly sprints. Here clients are more comfortable structuring the contracts with short tenures. The rise in the number of short tenure deals is linked to the growing share of such work in our order book.

On the outsourcing front too, average deal tenures have come down on the heritage stacks. That is because enterprises are in the midst of a technology transition. As clients migrate to the cloud, their legacy

We expect the transition to be a seamless one. Horizon One is a bounded opportunity and will plateau at some point when most of the workloads are migrated. By that time, the other two horizons, which are boundless opportunities would have scaled up and will support our future growth.

[3] Integrated AR FY 2021, Page 22

infrastructure, application and data estates will eventually be replaced, re-engineered, re-platformed or retired. Given the desire to get this transformation done rapidly, they are outsourcing the run and change of the existing portfolio for relatively shorter tenures and hence lower TCVs.

Krishnan: The impression about smaller companies growing faster is more due to sampling bias, based on a handful of highly visible outperformers. That is not true if you look at the global cohort. Even though the bottom quartile by revenue size had its best growth in a decade in 2021, it still underperformed the top quartile by a significant margin.

Overall, the current demand environment is a rising tide that has lifted all boats. Horizon One is a very democratic opportunity, largely technology-centric. Having enough people with the requisite certifications and skills is sufficient to participate in this opportunity. The severe talent scarcity is also driving a broad outsourcing demand. Also, smaller players are enjoying strong demand from clients in the small and medium enterprise category, with little competition from larger providers.

> All deals are important to us. Billion-dollar deals are especially important because they boost medium-term visibility and provide us opportunities to bring the whole of TCS' offerings to play. We are very pleased at winning two such deals during the year.

We adopted the new organization for a very different reason, so we reach our next revenue milestone, fighting fit. The new structure is designed to ensure that our clients receive curated experiences which make them feel just as valued, no matter how large we grow. It is also designed to help us replicate best practices across our client base and expand the number of clients who bank on us as their trusted growth and transformation partner.

The large scale vendor consolidation anticipated two years ago doesn't seem to have materialized. How come?

Krishnan: Vendor consolidation is typically done to find an alternative strategic provider with a richer set of capabilities and a superior execution track record. However, the sharp recovery and subsequent growth in demand, coinciding with the great resignation and talent scarcity, have resulted in enterprises focusing more on pursuing their immediate technology priorities.

That said, we still won several large deals during the year where we displaced incumbents. If you look at the global market, the industry grew 6% whereas all the top tier players grew double digits, indicating that the longer-term consolidation trends are very much intact.

The industry didn't see too many billion-dollar deals in FY 2022. How important are they for longer-term growth?

NGS: All deals are important to us. Billion-dollar deals are especially important because they boost medium-term visibility and provide us opportunities to bring the whole of TCS' offerings to play. We are very pleased at winning two such deals during the year. Having said that, the perceived importance of such deals for longer term growth need not be exaggerated versus smaller deals of say, $100million+ TCV.

For sustained longer term growth, what matters is that the base order book size, excluding the occasional mega deal, keeps growing year after year, and that the quality of revenue keeps improving with higher value engagements. Our average order book size which used to be in the $6-7 billion range in FY 2021 moved to the $7-8 billion range in FY 2022, and ended with an all-time high order book of $11.3 billion in Q4. We are very pleased with that progression.

How will the tensions in Europe, rising inflation and the looming threat of a recession affect spending on innovation, on technology and on your growth outlook?

Ananth: Let me address the innovation part. It is a misconception that innovation is a nice-to-have activity apt for only good times. In fact, it is essential at all times, good or bad. In good times, enterprises

Partnering with TCS to innovate at scale will enable them to try out more ideas, and experiment more extensively with the same budget, and improve the yield on their innovation investment.

may fund more product innovation or customer experience transformation, targeting business growth or increased customer intimacy.

In tough times, they find new ways of working to boost their resilience and adaptability – for example, re-designing the value chain at a strategic level. The sheer volume of innovation we saw over the last two years, even in the face of bleak business outlook, is testament to that. We designed and rolled out AI-powered digitized underwriting and claims processing for insurers, omnichannel experiences with in-aisle checkouts for retailers, or remote monitoring and pre-emptive maintenance of equipment for manufacturers and utilities. None of these are `nice to have' capabilities. These were necessary to simply stay in business, to stay relevant in the face of changing consumer behavior, and to cope with the operational challenges posed by the pandemic.

So even in an economic slowdown, innovation doesn't stop. They may reprioritize one program over another based on shifting objectives, but the spending will continue. Partnering with TCS to innovate at scale will enable them to try out more ideas, and experiment more extensively with the same budget, and improve the yield on their innovation investment.

NGS: We have been through multiple disruptive macroeconomic events in the last decade and a half – the GFC, taper tantrums, Eurozone crisis, Brexit, the pandemic and now the war and the resulting humanitarian crisis. We always take a view that business is about growing in a constrained environment and over these events, we have survived, continued to grow and have ensured that we stay ahead of the technology curve. This speaks to the resilience of our business model, and of the essential nature of the services we offer to businesses across the world.

Today, technology is central to any enterprise. Businesses are rooted in technology, to the extent that every company is aspiring to become a technology company. Insurers are launching technology platforms for their ecosystem partners, and generating new revenue streams from that. The world's largest banks are incubating fintechs within the enterprise, and betting on those to drive their future growth. Retailers are depending heavily on online sales. These are all recent structural changes.

So conventional wisdom on technology spending, based on historic behaviors during prior slowdowns, may not be as reliable. In the post-pandemic world, we expect technology spending to hold up well even in a downturn.

We can't predict the future, but based simply on the deal signing momentum, our pipeline, and our on the ground observations of clients planning multi-horizon investments for their growth and transformation, we remain confident that we are on a good growth trajectory for the next three to five years.

Transforming Israel's Banking Sector

The Government of Israel's Ministry of Finance was looking to encourage the entry of new digital-only banks that would boost competition, spark greater innovation and rejuvenate the banking sector. It selected TCS to play a leading role in this initiative, for its deep domain knowledge in the banking industry and experience in working with the largest financial institutions in the world.

TCS built the Banking Service Bureau (BSB), a shared, end-to-end digital banking operations platform powered by TCS BaNCS™, that start-up banks can easily plug into, to launch their operations quickly and securely. It connects to the entire banking and securities ecosystem in Israel, including local and international payment gateways, stock exchanges, various regulatory authorities and market data providers.

The first bank to commence operations using BSB is One Zero Digital Bank, Israel's first completely digital bank, and the first to receive a banking license in the country in over 40 years. Currently running as a pilot, the bank will be open for all customers in the coming months.

Besides start-up banks, incumbent banks can also take advantage of the BSB's modular architecture and consume only specific best-in-class capabilities to gain competitive differentiation and drive growth.

One of the modules in the BSB is its Digital Bank Guarantee platform, powered by TCS' Quartz® blockchain solution. It digitally transforms the end-to-end lifecycle of guarantees, enables seamless data sharing with various beneficiaries, faster execution, reduced errors, and enhanced transparency, security and data privacy. Bank Hapoalim, Israel's largest bank, with a 30% share of all bank guarantees in the country, has signed up for this platform.

"As the first digital start-up bank in Israel, our motto is to provide differentiated banking services and use technology to its fullest potential to deliver an innovative alternate to traditional banks. While we have started with Israel, we are keen to grow in other markets too. As part of this journey, TCS' Banking Service Bureau powered by the TCS BaNCS product suite has helped us gain an early lead by making available a full digital core for banking, including the necessary infrastructure and operational processes. This has given us the space to focus on our core offerings and launch banking services in rapid time.

Gal Bar Dea
CEO, One Zero Bank

Enabling Swiss Re's Risk Partnership Strategy for Future Growth

Swiss Re, one of the world's leading providers of reinsurance, insurance, and other forms of insurance-based risk transfer, conducts its business with a clear vision: to make the world more resilient. The company supports its clients with its deep knowledge of risk and its capital strength, and helps the world rebuild, renew, and move forward.

A distinctive aspect of Swiss Re's business strategy is leveraging ecosystems across its different businesses to go beyond conventional reinsurance into new products, services, and even entirely new models for risk business. It is creating new collaborative business models where it partners with corporates to create new solutions with embedded insurance, or with other insurers, reinsurers and even governments to leverage shared knowledge, expertise, and capabilities – protecting more customers, in newer ways.

TCS is helping Swiss Re realise this ecosystem vision in its credit and surety reinsurance business by building a cloud-native, microservices-based end-to-end underwriting platform, including the front-end digital channels and a digital marketplace that offers instant quotes.

The new platform will leverage cloud-native capabilities to help Swiss Re transform its underwriting processes, using larger and richer datasets, deep analytics, and automation to significantly enhance the underwriting quality, speed, and throughput. This will enable Swiss Re to provide a superior customer experience, offer a broader range of products, and take on more business.

The platform is being architected so that it can be opened up to other insurers or reinsurers, giving them access to new attractive risk pools through Swiss Re's extensive network of banks and other lenders.

The partnership with TCS will equip Swiss Re with a platform to power future growth by expanding its underwriting capacity to take on new business, while creating an additional revenue stream from the ceded risk distributed to other reinsurers.

"Our clients and partners are at the heart of Swiss Re's strategy, and together we make the world more resilient. We offer tech-enabled risk knowledge and data-driven insight to address inefficiencies in the market and support data-driven business decisions. TCS has been a collaborative technology partner in our drive for digital transformation. We are moving into a modern cloud-based landscape which will realise our vision, power our future growth, and solve business and global challenges.

Florian Maurer
Global Head of Applications
Swiss Re

How did you cope with supplyside challenges due to the Great Resignation this year? Is the worst behind us?

Milind: Yes, it has been a challenging year for employers all over the world. In our industry, it wasn't as much due to the Great Resignation, as a churn within the industry. Peers who had not anticipated the sharp demand recovery scrambled to fulfill it by poaching at scale from other companies. That triggered a cycle of hiring and counter-hiring of each other's employees, sending attrition rates shooting across the industry.

Our attrition went up as well. But our commitment to people, investing in them and empowering them to realize their potential, along with closer employee engagement, have helped us remain a benchmark in talent retention. We also expanded our hiring program, flexing the strength of our employer brand to attract experienced and fresh talent at scale. We undertook several other tactical measures to cope with the supply side challenges, including generous promotions, retention bonuses and increased use of sub-contractors.

More importantly, we addressed the structural problem of industry-wide talent scarcity by training and onboarding 118,000 fresh engineers in FY 2022. This massive infusion of fresh talent by us, as well as by others in the industry, should start easing the problem in FY 2023. There are some early signs of this. Our attrition is plateauing on a quarterly annualized basis. LTM attrition will likely rise further in the first half of FY 2023 and after that, it should start tapering.

Over the last 3 years, your net addition has significantly outstripped your revenue growth. Where is the disconnect?

Milind: There are two reasons. One, there was significant offshore shift during the pandemic due to greater acceptance of remote working, local talent scarcity, and the flow of work to where the talent resides. That was deflationary in nature. Second, we have been hiring additional numbers ahead of demand, in anticipation of continued growth momentum and to have a ready bench to back-fill attrition.

Q&A with Finance and HR

Samir Seksaria,
Chief Financial Officer

Milind Lakkad
Chief Human Resources Officer

Dr Ritu Anand
Head – Leadership & Diversity

Despite the strong growth during the year, the operating margin stayed flat. How should we look at margins for the next year?

Samir: During the year, our annual salary increase and the tactical interventions that Milind referred to, resulted in a 330 bps margin headwind. Operating leverage, improved realizations and some currency support helped us mitigate to the extent of 270 bps, resulting in an industry-leading operating margin of 25.3%.

Looking ahead, I expect the supplyside headwinds to persist for most of the year. Additionally, as things normalize, travel and facilities expenses should also inch up. That will be mitigated by the full year benefit of large numbers of fresh engineers onboarded in FY 2022, leverage from continued revenue growth, improved realizations and hopefully, some currency support. Overall, we want to keep our margins stable in the medium term.

You used to guide to a 26-28% range? Is that no longer viable?

Samir: We don't provide revenue or margin guidance. However, 26-28% remains our longer term aspirational band for the operating margin. Setting aside short term headwinds, we don't see any change to our longer term cost structures or our relative competitiveness. Just five quarters ago, we were in that band, so there is no reason why we can't get there again.

We have kept our margins in the same tight band for over a decade now. During this period, we have outgrown our largest and far more acquisitive local and global peers, and delivered better margins..

You have had industry-leading margins for several years. Is that constraining your growth versus peers?

Samir: We don't think so. We truly believe that it is possible to pursue profitable growth without compromising on either. The data bears us out. We have kept our margins in the same tight band for over a decade now. During this period, we have outgrown our largest and far more acquisitive local and global peers, and delivered better margins..

The underlying premise of the question is that with similar costs, higher margins must mean higher prices versus competition, and therefore lower sales. The flaw lies in that assumption on costs. While raw costs may be similar, our cost of delivery is lower because of higher level of industrialization in our delivery model, better training and better employer practices, resulting in better retention. So we are able to compete very effectively, and are winning all time high order books without compromising on profitability.

Let me also explain briefly how we manage margins on the ground. We have devolved decision-making to managers on the frontlines, closest to customers and best positioned to assess the tradeoffs. We hold them accountable for growth as well as profitability, while giving them autonomy to shape the commercials of individual engagements. This has given us a class of empowered, entrepreneurial leaders who win deals going head-to-head with our most aggressive peers on prices, if need be, while making up for the impact elsewhere, and delivering the committed margin at a portfolio level.

Of course, we continue to invest heavily in building capabilities to pursue the large organic growth opportunity. We are also open to acquiring assets which add to our capabilities or IP assets, but the decision is based more on valuations and ease of integration.

Switching gears, only 13% of the senior management are women. What are you doing to increase diversity at senior levels?

Ritu: We recognize the need to have a more diverse workforce, and have been running a structured program to drive diversity and inclusion within the organization. For us, diversity is not just gender diversity. We take a broader and more inclusive view, including gender, nationality, education, ethnicity, orientation, accessiblity and so on. By that measure, diversity in senior management is over 30%.

We currently have over 153 nationalities in our workforce. TCS is one of the largest employers of women in the world, with over 210,000 women in the workforce. This diversity is an aggregate outcome of deliberate efforts around hiring in every market, talent

development, promotion and retention, and policies specifically designed to encourage talented individuals, regardless of demographic profile, to plan longer term careers in TCS.

Women make up 13% of our senior management. But that figure doesn't tell the full story. Within that cohort, women fulfill 30% of our business development and delivery management roles. That is the pool from which tomorrow's business heads and top leaders will emerge, so I find that extremely encouraging.

Also, that percentage translates into nearly 4,000 senior women executives, making ours one of the largest such teams in the world. Our policy of grooming and promoting leadership from within, personalized assessments, leadership development programs, promotions and the collective efforts of the entire leadership team have helped us grow the number of women in that cohort by 84% over the last five years.

With continued push and with new leadership positions opening up faster, and in larger numbers because of the high growth environment we are in, we are confident that we will make more progress over the next five years, than we did in the last five. But there are no shortcuts to this.

Why not? You could just announce a target to have 50% women in senior management and hire accordingly?

Ritu: Yes, we could. Hiring only women senior managers from outside for all new leadership roles would certainly give us an opportunity to trumpet our leadership in gender diversity. But I see this as unsustainable.

Women's overall participation in the labor force here is under 20%, perhaps 15% if you take the urban workforce. The percentage at senior management levels is much smaller, and the available hiring pool is a fraction of that. Given this lack of availability at an industry level, companies would simply end up hiring and re-hiring each others' senior executives, driving up industry-level executive churn.

Instead, the industry should address this at a systemic level, and collectively do more of what we are currently doing at TCS. Run school-level programs to encourage girls to pursue STEM education and careers, support mentoring programs, provide opportunities to women returning after career breaks, invest in leadership development and increase the number of women at all levels. That will expand the industry's female leadership pool and give everyone an opportunity to avail the benefits of diversity.

Milind: Also, parachuting external candidates into leadership positions just to achieve a diversity quota is demoralizing to existing employees, men and women, whose own growth aspirations get derailed. One of the biggest contributors to our industry-leading talent retention is our long-standing policy of preferring internal candidates for new leadership positions. Hence our organic approach. This may take time to show on the outside, but it is fairer to our employees and more sustainable in the long run.

One of the biggest contributors to our industry-leading talent retention is our long-standing policy of preferring internal candidates for new leadership positions. Hence our organic approach. This may take time to show on the outside, but it is fairer to our employees and more sustainable in the long run.

As you look at doubling your revenue, what will TCS' workforce look like? Will you have a million employees?

Milind: We believe our workforce will be more diverse, demographically and geographically. With a larger business transformation component in our revenue mix, I expect that we will also have more diverse capabilities within the workforce – more researchers and innovators, more business consultants across industry verticals and technology horizontals, more product and IP owners, more solution architects, and more specialists in softer areas like empathetic design and organizational change management.

It is harder to predict how the headcount will grow. With a larger component of G&T revenues with higher realizations, IP-linked revenues and the mainstreaming of technologies like low code/no code which are less effort intensive, we should be able to double revenues without needing a million employees. But even if it comes to that, we are no longer intimidated by large numbers. Our model has proved its scalability, and we are confident we will continue to remain a benchmark in talent management.

Helping RS Components Deepen Customer Relationships and Drive Profitable Growth

RS Components, the world's largest distributor of electronics and maintenance products, is a trading brand of UK-based Electrocomponents plc. The company supplies industrial products, electronic and electrical components, test and measurement equipment, engineering tools and consumables via e-commerce, telephone and RS Local stores. It operates in 32 countries serving over 1.2 million customers with 500,000 stocked products from over 2,500 leading suppliers.

RS Components partnered with TCS to create a new business model that would enable new value-added services in industrial maintenance, foster closer relationships with customers, and drive further demand for its products. TCS used its Bringing Things to Life™ IoT framework, and its deep domain knowledge in digital manufacturing, remote diagnostics and predictive services to help build a new AWS IoT based reporting and condition monitoring system that has been branded RS Industria.

This scalable, secure new platform allows customers to connect their manufacturing assets quickly and easily, for real time monitoring that provides insights into the causes of production losses and component failure.

RS Components' first client for this solution, a food manufacturing site in the UK, has a number of high value assets such as industrial motors, production line equipment and a treatment plant connected to the platform. The real-time monitoring and insights generated by the system have helped cut fresh water consumption, and also reduce the effort and cost of managing the wastewater treatment.

The system is also being used to help reduce the site's energy consumption by monitoring usage at a production line level, highlighting specific areas of energy loss in the production process. In the near future, the customer is using the modularity of RS Industria to rapidly expand the system to enable condition monitoring of critical assets.

RS Components and TCS are now working together to replicate this success for other end-customers in other industry segments. Partnering with TCS for its growth and transformation has helped RS Components embrace a new business model that makes it a valued and trusted business partner to its customers, creates new revenue streams, boosts profitability and reinforces its position as an innovation pioneer in the industrial component ecosystem.

> Partnering with TCS in launching RS Industria brought a number of strengths to us – their IIoT expertise, their knowledge around remote diagnostics and predictive services, their understanding of the Amazon Web platform and how to build really advanced solutions in that space and lastly their collaborative way of working. All of these helped us realize our vision around this new offering much faster.
>
> **Richard Jeffers**
> Director, Industrial Design Solutions
> RS Components

Boosting Colruyt's Competitiveness with Algorithmic Pricing

Colruyt is a leading retailer in Europe with online shops and over 1,000 physical outlets across Belgium, Luxembourg and France. It has ten business formats and diversified business lines.

Colruyt's business success has been built on keeping costs down and investing resources in guaranteeing the lowest price for every product at any time. But this is no easy feat. Staying on top means monitoring competitors' online and in-store prices and promotions, and responding to changes with updated prices for those items, as well as for hierarchically linked items, across all stores and business formats.

Over time, Colruyt's pricing processes were finding it difficult to cope with the sheer volumes and complexity. Colruyt started the successful collaboration with TCS as the strategic partner to harness the power of automation and other digital technologies to transform its pricing platform.

Colruyt and TCS collaborated successfully to implement the Next-Gen Pricing Engine, an algorithmic, near real-time, intelligent system that automates the deployment of the pricing strategy across products, linked items, stores, channels and brands. To improve the instore price recording from competitor locations, a real time mobile app was launched to boost the productivity and accuracy. The system uses in-parallel memory processing for large volumes of data to generate price recommendations at near real time speed.

Very importantly, the engine caters to the varied pricing strategies relevant to Colruyt's different business lines – regular everyday low prices, high-low, promotions and markdown, enabling the competitive benefits to accrue across the enterprise.

Partnering with TCS for the innovative use of technology is helping Colruyt respond to competitors 24 x 7 with speed and agility, capturing over 100,000 competitor prices, and processing up to 50 million reaction prices per day. This has helped the retailer strengthen its competitive differentiation, live up to its brand promise and drive growth.

> At Colruyt, we continuously focus on technology innovation to help our businesses respond quickly to changes in the market, and to grow. The Next-Gen Pricing Engine is one such innovative, mission-critical platform that we have built in partnership with TCS. Their deep retail industry knowledge, digital expertise and collaborative ways of working helped us accomplish our vision to harness the power of AI, automation and digital technologies to help elevate our brand and strengthen our competitive edge.
>
> **Peter Vanbellingen**
> CIO, Colruyt IT

Transforming India's Lending Sector with a New Digital Platform

Non-Banking Financial Companies (NBFCs) are a key component of India's financial ecosystem, helping make credit and other financial services accessible to the small-scale and unorganized sectors, and to the large unbanked population. However, with low technology intensity and largely manual processes, these firms have struggled to meet consumer expectations around digital experience and speed of service on the one hand, and with regulatory compliance and lack of easy access to capital on the other hand. This has held back the sector's growth relative to the market's potential.

Recognizing that the industry's fragmented structure and common attributes lent itself to a cloud-based SaaS platform, TCS built a first-of-its-kind, cloud-based lending and securitization solution, bringing together the power of two of its highly successful products – TCS BaNCS™ and TCS iON™, and the DigiGOV™ governance framework, to completely digitize and reimagine the core processes for the sector.

The new platform is a collaborative, connected system that transforms the end-to-end lending and securitization value chain, offering secure and timely flow of data among stakeholders within the ecosystem. It leverages AI and ML to enhance end-customer and internal-stakeholder experience, and improve speed and accuracy in decision-making.

NBFCs subscribing to the platform benefit from enhanced customer experience, improved liquidity, more resilient and agile operations, and improved regulatory compliance across lending and securitization. Impressed with the rich functionality, flexibility and scalability of the solution, some of India's largest private sector banks are also adopting it for their personal lending business.

Aadhar Housing Finance Limited, a housing finance company with a pan-India presence implemented TCS' lending and securitization solution in FY 2022 and has been able to transform its operations, end to end.

At the back end, TCS' solution has helped strengthen controls, ease regulatory compliance, enhance data security and drive operational efficiency. On the front end, it has enabled easier and more efficient customer experience. The solution's robust lead management processes, with lead tracking and reporting have helped drive Aadhar's growth and expand its market presence.

"Our partnership with TCS is helping us to realise our strategy of investing in technology enabled solutions to improve customer experience. We hope to reap the full benefit of this transformation to expand our market reach.

Deo Shankar Tripathi
MD and CEO
Aadhar Housing Finance Limited

Management Discussion and Analysis

Overview of the Industry

The global economy recovered strongly in CY 2021 even as new variants of the COVID-19 virus fueled additional waves of the pandemic. Robust policy support in advanced economies, availability of vaccines and relaxation of pandemic restrictions helped economies bounce back, collectively expanding world output by an estimated 6.1%[1].

Global technology spending grew strongly in 2021 to $1.7 trillion[2]. The primary drivers were accelerated investments in digital transformation and cloud adoption in response to changed consumer behaviors and the need for greater operational resilience. Additionally, there was increased outsourcing by enterprises looking to free up financial as well as human resources to execute their transformation programs. A severe talent scarcity added to the outsourcing imperative. IT services grew 6.2% YoY, crossing $899 billion while BPM grew nearly 5% to reach $211 billion.

The global IT services industry continues to be a highly fragmented one, with even the largest provider having a mid-single digit market share. TCS is among the largest IT services providers globally, with a market share of 2.3%, and has outperformed the market, growing significantly higher than market growth over the last decade.

This may be attributed to market share gains resulting from TCS' customer-centric strategy and organization structure, a very stable management team, focused investments in building superior capabilities, better execution resulting greater customer satisfaction, and steadily expanding participation in customers' growth and transformation spends.

[1] *World Economic Outlook, IMF, April 2022*
[2] *Nasscom Strategic Review Report 2022*

TCS' Business

An Overview

TCS is an IT services, consulting and business solutions organization partnering many of the world's largest businesses in their transformational journeys for the last 54 years. It has a global presence, deep domain expertise in multiple industry verticals and a complete portfolio of offerings – grouped under consulting and service integration, application services, digital transformation services, cloud services, engineering services, cognitive business operations, and products and platforms – targeting every C-suite stakeholder.

The company leverages all these and its deep contextual knowledge of its customers' businesses to craft unique, high quality, high impact solutions designed to deliver differentiated business outcomes. These solutions are delivered using its Secure Borderless Workspaces™ (SBWS™) operating model which enables a highly distributed, Location Independent Agile™ delivery.

TCS geographic footprint covers North America, Latin America, the United Kingdom, Continental Europe, Asia-Pacific, India, and Middle-East and Africa.

TCS considers industry verticals as its primary go-to-market business segments. The key vertical clusters are: Banking, Financial Services and Insurance (BFSI), Retail and Consumer Business, Communications, Media and Technology (CMT), Manufacturing, Life Sciences and Healthcare and Others. The last category includes Energy, Resources and Utilities, Public Services and others.

Strategy for Sustainable Growth

Customer-centricity is at the heart of TCS' strategy, organization structure and investment decisions. TCS' customer-centric worldview helps spot trends early, embrace business opportunities by making the right investments and mitigating risks while discharging its social and environmental responsibilities.

TCS has been broadening and deepening customer relationships by continually looking for new opportunities and newer areas in their businesses to add value, proactively investing in building newer capabilities, reskilling its workforce and launching newer services, solutions, products and platforms to address those opportunities.

In the last few years, the company has been using its investments in research and innovation, its intellectual property and deep contextual knowledge of the customer's business and technology landscape to proactively pitch ideas and solutions designed to improve the client's topline and help drive competitive differentiation.

These growth and transformation (G&T) engagements are higher value engagements catering to the needs of a broader set of stakeholders in the client organization, and is helping drive a steady increase in the scope and scale of services consumed year after year, and expand TCS' share of wallet, as evidenced by the client metrics.

At an aggregate level, this strategy has resulted in deep and enduring customer relationships, a vibrant and engaged workforce, industry-leading profitability, a steady expansion of the addressable market, and a proven track record in delivering longer term stakeholder value.

Enabling Investments

TCS pioneered[3] the use of the word 'digital' to describe the new family of technologies that emerged in the last decade. Quick to recognize the potential of cloud, the company made investments ahead of time in launching new platform-based business models as far back as in 2009[4], reskilling the workforce, research and innovation, building collaborative workspaces and innovation centers, intellectual property, and alliances and partnerships. Those early investments have given TCS a head start in participating in its customers' G&T journeys.

Over the last 3 years, TCS has been investing in a network of Pace Ports, co-innovation hubs in all its major markets, to provide a physical space for TCS teams to engage with clients in ideation, rapid

[3] *Ref AR FY 2012, MD&A, Pages 25, 29*
[4] *Ref AR FY 2010, Letter from CEO, Page 7*

prototyping and agile development of innovative ideas. These hubs also house researchers and members of TCS' extended innovation ecosystem of start-ups and academia. Adding to the Pace Ports in Tokyo, New York, Pittsburgh and Toronto, the company inaugurated the Pace Port at Amsterdam in May 2021, and a Digital Garage in Sydney in February 2022.

TCS continued to invest in intellectual property, launching new variants within the ignio™ suite and building newer functionality and features in the TCS BaNCS™ suite, the Algo Retail suite, the TCS ADD suite, HOBS, TwinX, MasterCraft and Jile. Across each of the industry verticals, the relevant business units launched new service offerings and solutions, catering to the evolving needs of the market – such as the ESG Integration solution suite on all three hyperscaler platforms covering EU taxonomy, Sustainable IT, Green Mortgage, Carbon Bank and Cal-C (Carbon Calculator).

The company launched Cyber Defense Suite – a comprehensive suite of modular, quickly adoptable cyber security services on a single platform – to provide enterprises with a unified 360-degree visibility and predictive intelligence to proactively defend and respond against evolving risks.

TCS' dedicated practice units around AWS, Microsoft Azure and Google Cloud Platform, launched in FY 2021, offer customers the full range of transformational and operational services on the respective hyperscaler stacks, spanning advisory services, migration, application and data modernization, including SaaS and enterprise productivity suites, infrastructure, cyber-security and edge.

These units have been steadily investing in training, certifications, credentials and in building solutions and intellectual property on their respective hyperscaler stacks. In FY 2022, TCS added TCS Omnistore, TCS MasterCraft, 5G Edge Suite, TwinX and its suite of sustainability solutions – namely TCS Clever Energy, TCS IP2 and TCS Envirozone – to the list of its software products and solutions available on the various hyperscaler platforms. TCS also launched Google Cloud Garages for co-innovation leveraging analytics and AI on the cloud, at its Pace Ports in Amsterdam, New York and Tokyo.

New Organization Structure

TCS rolled out a new, industry-first organization structure at the end of FY 2022 that further enhances the company's customer centricity. The new model recognizes that customers' needs vary and evolve over time as they progress in their relationship journey with TCS, and enables the delivery of a curated experience best suited for each customer's current stage in that journey. It does this by adding a fourth dimension – i.e. customer relationship stage – to the existing three dimensions of TCS' organization structure: geography, industry vertical and service line.

Customer acquisition will continue to be done by local sales teams in the various markets. Existing customers in major markets will continue to be serviced by the same client partners, but the governance layer on top has been realigned. Instead of being governed as vertical-wise business groups, customers have now been segmented by relationship stage, and vested with three business groups:

- **Relationship Incubation Group** to manage new relationships which require a higher level of hand holding and a differentiated, high touch delivery;
- **Enterprise Growth Group** to manage relationships which are in the high growth phase;
- **Business Transformation Group** to manage large and mature relationships.

The company's primary reporting segments will continue to be industry verticals and geographic markets. Existing verticalized governance structures, the Industry Solution Units (ISUs) and sub-ISUs, will see their portfolios realigned and rationalized under these three business groups. Customers in emerging markets will continue to be serviced by local country-based organizations.

The sharper customer focus enabled by the new structure and the resultant curated customer experiences are expected to enhance customer intimacy, facilitate cross-selling and up-selling, expand share of wallet and prepare the company for the journey ahead.

Strategic Responses to Opportunities and Threats

Opportunity / Threat	TCS Approach	Outcomes
Greater interest in using technology to drive business growth	• Focused on developing contextual knowledge and applying that for inside-out transformations. • Continued investments in research and innovation, TCS Pace Ports, and intellectual property. • Dedicated practice with domain experts to bring together TCS' differentiated capabilities from across the organization to stitch together comprehensive solutions. • Proactive pitching of solutions to customers' most pressing business problems. • New brand tagline 'Building on Belief' to strengthen positioning as a growth and transformation partner.	• Expansion of addressable market. • Growing share of G&T business adding to growth. • Higher quality revenue, lending margin resilience. • More deeply embedded in the clients' business. • Engaging with a broader set of buyers in the client organization. • Higher visibility within C-Suites.
Accelerated adoption of public cloud	• Launched dedicated business units with end to end capabilities on each of the hyperscaler platforms. • Continued investment by each of these units in skills, certifications, credentials, IP and accelerators. • Articulated the multi-horizon cloud transformation framework. • Made available TCS products and solutions on public clouds.	• Strong growth in cloud transformation revenues. • Top tier partner to each of the hyperscalers. • Preferred partner to clients seeking to use cloud native capabilities to power their growth and transformation.

Opportunity / Threat	TCS Approach	Outcomes
Greater acceptance of as-a-Service platforms	• Strengthened alliances and launched new offerings around the popular and new SaaS products. • Helped ISV* clients upgrade their products to launch new SaaS versions. • Partnering with product manufacturers to help launch innovative as-a-Service offerings using TCS Bring Things to Life IoT framework. **TCS IP:** • Launched SaaS versions of in-house product portfolio; made available on hyperscaler platforms. • Used IP portfolio to launch new platforms that bundle IP and shared services on the cloud.	• Stronger win-win partnerships. • Expansion of addressable market. • Strong growth in SaaS sales. • Platforms drive stickier relationships, with long term revenue visibility.
Operations optimization to fund transformation	• Launched the Machine First™ Delivery Model, embedding automation deep within the enterprise to drive greater efficiencies. • Launched the TCS Cognix™ hyper-automation suite with pre-built solutions for business and IT operations transformation.	• Operations transformation order book of over $1Bn from Cognix since its launch. • Reputation as a partner who helps structure self-funding business transformation programs.
Pandemic-forced remote working	• Launched the Secure Borderless Workspaces™ operating model. • Announced Vision 25x25, heralding a new hybrid working model for the longer term. • Implemented 'talent clouds', staffing projects using AI to match skills, regardless of location.	• Ensured business continuity on mission-critical activities. • Faster ramp-up of new projects. • More opportunities for employees, based on skills rather than their location. • More flexible working arrangement, that is more gender inclusive.

* *Independent Software Vendor*

Talent Management

TCS aims to attract, develop, motivate and retain diverse talent, that is critical for its continued success. The company's talent management strategy seeks to maximize the potential of every employee by creating a purpose-driven, inclusive, stimulating, and rewarding work environment, delivering outstanding employee experience, while fueling business growth.

In FY 2022, TCS made the highest ever net addition of 103,546 employees globally, taking the total employee base to 592,195, with 153 nationalities. The company crossed a key diversity milestone, with women in the workforce exceeding 200,000 during the year. Further, TCS was included in the 2022 Bloomberg Gender-Equality Index (GEI).

Industry-Leading Initiatives

- SPEED Feedforward: A pioneering initiative that takes TCS' continuous feedback performance appraisal system to the next level by providing real time, objective performance data consolidated from various systems in employee's goal sheets.
- ReBegin: An initiative for experienced women professionals to reinvent their career, received over 14,000 applications.
- TCS Vaccination League: A pioneering and one-of-a-kind initiative to vaccinate employees and their families across 160 locations in India, in metros as well as Tier 2/3 cities.

Employee Health and Wellbeing

Putting employee safety and wellbeing as a paramount objective, TCS provided pandemic assistance and outreach through an enhanced hospitalization policy, home health care support and access to covid care centers set up at TCS facilities in 13 cities. TCS also introduced Emergency Medical Assistance, an interest free loan to support hospitalization needs during COVID-19. Over 260,000 wellbeing calls were made to over 48,000 associates and dependents, and nearly 100,000 teleconsultations were provided to ensure proactive medical and emotional support.

The TCS Vaccination League benefited 1.2 million individuals and resulted in over 87% of employees in India getting fully vaccinated and 95% receiving at least one dose.

Talent Acquisition

TCS' talent acquisition strategy is to identify, engage and hire the best talent with the right competencies required by the business at the right time to promote future business growth. Its technology-enabled, data-driven, 100% virtual hiring model has enabled quicker decision making, enhanced agility and scaled well globally, while retaining the local nuances required for building a diverse workforce.

The company remains the preferred employer at leading engineering campuses in India. Its college recruitment efforts in USA, Canada, Latin America, China and Hungary have been progressing well, with very encouraging outcomes. TCS was one of the largest job creators in IT services in several major markets, for both freshers and lateral hires. In the United States, TCS has hired nearly 32,000 employees over the last five years.

In India, over 789,000 students from over 4,200 institutes appeared for TCS' National Qualifier Tests from the safety of their homes. TCS was also among the biggest recruiters at top B-schools and national institutes.

Key Achievements:

- TCS CareersNext – TCS' interactive platform to enrich the lateral talent pipeline connected over 51,000 experienced professionals, enabling them to choose from a wide palette of career opportunities that matches their passion and skill set.

- Highly successful internal referral program accounted for 30% of total joiners in FY 2022.

- TCS CodeVita™ – Season 10 of TCS' flagship global coding contest saw 305K+ registrations across 85 countries.

- HackQuest - Sixth edition of TCS' ethical hacking contest saw over 5800 active participants.

- TCS Academic Interface Program – Engaged 196,474 students (20,687 outside India) from 1,618 institutes (554 outside India) through workshops and faculty development programs. 3,844 interns (414 outside India) on boarded in FY 2022.

Diversity, Equity and Inclusion

TCS is an equal opportunity employer and has a well-defined and progressive Diversity, Equity and Inclusion (DEI) policy embracing all diversity parameters which includes gender, marital status, religion, race/caste, colour, age, ancestry, nationality, language, ethnic origin, socio-economic status, physical appearance, disability, sexual orientation, gender identity and/or expression and any other category protected by applicable law.

TCS recognizes that a diverse and inclusive workforce is necessary to drive innovation, foster creativity, and guide business strategies. This year TCS reached a significant milestone to become one of the few organizations in the world employing more than 200,000 women. The company's focus has been to enable better representation of women through sustained interventions at every level. Key programs include:

- iExcel: TCS' flagship executive leadership development program for women after which participants receive project-based mentorship from senior leaders and emerging leaders from different businesses, generations, and cultures. So far, TCS has had 20 editions of this program, benefiting 1,290 women leaders.

- Project Synthesis: A large-scale initiative with a multiculturistic approach to teams, clients, and strategy, to help managers build a deeper understanding of inner diversity and engage with the collective community. 8,682 managers across 37 nationalities have undergone this program.

- The Diversity Maturity Matrix: In-house diversity measurement tool aims at identifying gaps and, assesses an organization's maturity in DEI provides insights on strategic planning and action to increase DEI maturity.

- Allies of Diversity - A program where senior leadership from client organizations are invited to share diversity best practices. 24 chapters across 52 different client organizations engaging 58 senior leaders have been completed.

- The Workplace Coach: A 75-hour internal coach certification program enabling individuals to become coaches. This supports individuals within the organization towards ACC certification. So far, 2 cohorts have been completed, bringing together 212 internal coaches.

- Education and Sensitization: TCS has mandatory online DEI training designed to help associates understand the key concepts of DEI and belonging, that 481,000 employees have completed.

Talent Development

TCS is focused on building and developing enduring capabilities for a future-ready workforce.

Key initiatives include:

- TCS Elevate: TCS' pioneering program linking learning to career growth and reward covered over 322,000 employees. Over 13,000 employees were identified as high talent and received increased compensation.

- Contextual Masters (CMs): With a learning intensity 15% higher than average, CMs are groomed into potential G&T leaders. TCS now has over 50,000 CMs, up 169% over the year. The community has strong gender diversity, with 24% women.

- India Freshers Training: Over 100,000 trainees were onboarded during the year, the highest number ever. In addition to the Virtual Xplore foundational training program, fresher training was further intensified with 47 digital technology certifications, daily webinars, weekly online assessments, and gamified hackathons. Over 200 webinars and post-offer engagement sessions were conducted.

Key Metrics:

- TCSers invested 121 hours of learning on average during the year.
- 3.5 million digital competencies acquired; over 171,000 employees deep skilled.
- Every hour, TCS clocked 8,400 course completions; 3,000 competencies acquired.
- One hands-on learning exercise completed every 8 seconds.
- Over 160,000 G&T-ready and 20,000 G&T leaders groomed across all the segments to take up G&T opportunities.

Purpose-driven Workforce Policies

The company's progressive policies have been instrumental in creating a vibrant, equitable and inclusive workplace. In FY 2022, TCS introduced a Global Guideline on Remote Working to enable smooth transition into a hybrid work model aligned with Vision 25x25.

TCS was one of the earliest globally to have a documented policy on vaccination and a guideline for quarantine leave. Thirty new HR policies were created in the areas of health and safety, compensation and benefits, mobility, leave, performance management, working hours and workplace conduct in response to statutory amendments, business environment and changing workforce needs.

Other policies of interest like the TCS Global Policy – Whistle Blower and Statement on Modern Slavery Act were revisited, along with 118 other policies to ensure that TCS upholds the highest standards of transparency and accountability towards all stakeholders.

Talent Transformation

TCS has multiple initiatives to help employees grow in their careers:

Xcelerate - Integrated platform to capture associates' aspirations and map them to future opportunities. Over 60% of TCSers have shared their aspirations and career goals in Xcelerate, and mechanisms are being developed to help them realize their ambitions.

iConnect - Collaborative tool designed to help employees reach out to senior mentors for guidance on career paths, and have face to face dialogues about their role and career.

Mentoring – TCS is promoting a culture of mentoring and coaching through systemic intervention programs, with over 37,000 mentors including over 1,500 Gold and Silver certified mentors. Over 10,000 leaders are part of the 360° inclusive feedback process.

Talent Review – TCS' program to create and sustain a healthy leadership pipeline. It enables leaders to share their career aspirations and preferences of mobility, followed by an assessment of their leadership attributes.

Exciting Opportunities – Internal platform to publish niche and critical requirements to the leadership and high potential communities, thereby facilitating talent mobility. This embodies the company's philosophy of giving the first right of refusal for all leadership positions to internal candidates, thereby enabling better leadership development and building strong organizational loyalty.

Competitive Compensation

TCS' business model depends on its ability to attract and retain talent in the highly competitive, global

market for software engineers with graduate or post-graduate degrees in engineering and with relevant technical skills.

Compensation levels are merit based, determined by qualification, experience levels, special skills if any, and individual performance. Compensation structures are driven by prevailing practices in each country that TCS operates in. The merit based, democratized, transparent talent framework – Elevate, is designed to establish a tighter linkage between learning, skill development, career and reward. The company regularly benchmarks its compensation plans and benefits with the market to ensure competitiveness.

At TCS, three months' notice is required from either side for termination.

Engagement with Purpose

TCS' Engagement with Purpose model reimagines employee engagement with a focus on health and wellbeing, lifelong learning, career development, living TCS' values, social collaboration, and community service. A key engagement platform has been the virtual #OneTCS Channel which hosts educative and inspirational speakers to foster a sense of community.

Key Achievements:

- Radio Maitree: a unique, interactive radio program to enhance employee connect saw participation by over 23,000 employees globally.
- About 712,000 employee interactions enabled through focused interventions such as Living my Values, Build My Career and Lifelong Learning.
- Leadership Townhalls cumulatively resulted in nearly 590,000 employee interactions with business leaders on TCS values and organizational belonging.
- Over 22,000 1x1 mentoring sessions and over 15,000 1x1 HR career conversations.

TCS' various employee connect and collaboration platforms are as below:

- Knome, KnowMax, GEMS: Platforms for social collaboration within the organization, learning, sharing and for rewards and recognition.
- Safety First: Initiative focused on employee safety and security.
- Fit4life: Builds a fraternity of health and fitness conscious employees and creates a culture of fitness' around 42,000 active users contributed a total of 19 million kms on the portal.
- Purpose4life: Forum for volunteering for community projects in the areas of education, health and environment; over 22,000 volunteers contributed to 617,000 volunteering hours in community initiatives that supported over 353,000 beneficiaries.
- Maitree: Community of TCSers and their families who plan activities that help create a bond among employees and promote work-life balance.
- TCS Cares: Program aimed at creating robust avenues to build an emotionally strong and mentally resilient workforce.
- PULSE: TCS' annual employee engagement and satisfaction survey is the organization's formal listening forum. Our Annual Employee Satisfaction Survey recorded an enthusiastic participation from associates globally, with an ASI of 80.6 and AEI of 81.0 - the highest over the last 14 years.

Employee Retention

TCS has always had the best retention rate in the industry. Its values-driven culture, progressive HR policies, and philosophy of investing in people and empowering them have made it an industry benchmark in talent retention practices. In FY 2022, IT services attrition was 17.4% on an LTM basis, the lowest among its peers.

FINANCIAL PERFORMANCE OVERVIEW

The discussions in this section relate to the consolidated, Rupee-denominated financial results pertaining to the year that ended March 31, 2022. The financial statements of Tata Consultancy Services Limited and its subsidiaries (collectively referred to as 'TCS' or 'the Company' are prepared in accordance with the International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB). Significant accounting policies used in the preparation of the financial statements are disclosed in the notes to the consolidated financial statements.

The following table gives an overview of the consolidated financial results of the company:

($ million)

	FY 2022			FY 2021 Adjusted*		FY 2021 Reported	
	Revenue	% of Revenue	% Growth	Revenue	% of Revenue	Revenue	% of Revenue
Revenue from operations	**25,707**	**100.0**	**15.9**	22,174	100.0	22,174	100.0
Earnings before interest, tax, depreciation and amortization (EBITDA) (before other income)	**7,113**	**27.7**	**13.1***	6,290	28.4	6,125	27.6
Profit Before Tax (PBT)	**6,930**	**27.0**	**14.0***	6,079	27.4	5,914	26.7
Profit after tax attributable to shareholders of the company	**5,139**	**20.0**	**13.9***	4,513	20.3	4,384	19.8
Earnings per share (in $)	**1.39**		**14.9***	1.21		1.17	

* Excludes provision towards legal claim

Analysis of revenue growth

On a reported basis, TCS' revenue grew 15.9% in FY 2022, compared to 0.7% in the prior year, due to accelerated spending on digital transformation initiatives, cloud adoption and increased outsourcing.

Average currency exchange rates during FY 2022 for the three major currencies are given below:

Currency	Weightage (%)	FY 2022 ₹	FY 2021 ₹	% Change YoY
USD	**53.0**	**74.61**	74.06	**0.7**
GBP	**13.6**	**101.50**	97.32	**4.3**
EUR	**11.8**	**86.36**	86.69	**(0.4)**

Movements in currency exchange rates through the year resulted in a positive impact of 0.5% on the reported revenue. The constant currency revenue growth for the year, which is the reported revenue growth stripped of the currency impact, was 15.4%.

Growth attributable to	FY 2022 (%)	FY 2021 (%)
Business growth	**15.4**	(0.8)
Impact of exchange rate	**0.5**	1.5
Total Growth	**15.9**	0.7

Segmental Performance

The revenue break-up by Industry Vertical and Geography is provided below:

Revenue by Industry Vertical

Revenue by Geography

Overview of Funds Invested

Funds invested exclude earmarked balances with banks and equity shares measured at fair value through other comprehensive income. ($ million)

	FY 2022	FY 2021	FY 2022	FY 2021	FY 2022	FY 2021
	Current		Non-current		Total funds invested	
Investments in mutual funds, Government securities and others	**3,998**	3,973	**24**	24	**4,022**	3,997
Deposits with banks	**2,086**	524	**163**	98	**2,249**	622
Inter-corporate deposits	**802**	1,530	**40**	4	**842**	1,534
Cash and bank balances	**292**	718	**-**	-	**292**	718
Total	**7,178**	**6,745**	**227**	**126**	**7,405**	**6,871**

Total invested funds include $226 million and $178 million for FY 2022 and 2021, respectively, pertaining to trusts and TCS Foundation held for specified purposes.

Segment revenues, year on year growth, a brief commentary and segment margins are provided below:

Industry Vertical	Segment Revenue FY 2022 *(FY 2021)* ₹ crore	YoY Revenue Growth %	Key Spending Areas	Segment Margin FY 2022 *(FY 2021)* %
Banking, Financial Services and Insurance	10,072 *(8,864)*	13.6	• Customer journey transformation, ecosystem strategies for new products and services, fintech adoption. • Sustainability and climate change initiatives. • Regulatory: New credit risk and operational risk mandates, controls management, consent order management and strategic framework for risk and finance management. • Technology: Cloud adoption, cyber security, IT estate rationalization, core platform simplification, agile and DevOps adoption.	26.8 *(28.5)*
Communication, Media and Technology	4,273 *(3,656)*	16.9	• 5G and fiber rollout, network virtualization. • Data and analytics, cloud enablement, product and platform engineering. • M&A, divestitures, business simplification. • Operating model resilience, cost optimization.	29.9 *(29.6)*

Industry Vertical	Segment Revenue FY 2022 *(FY 2021)* ₹ crore	YoY Revenue Growth %	Key Spending Areas	Segment Margin FY 2022 *(FY 2021)* %
Retail and Consumer Business	4,118 *(3,456)*	19.2	• Seamless and Unified Customer experience across channels, hyper personalization, last-mile delivery, marketplace, payments. • Supply chain transformation for speed and visibility. • Employee experience, automation, application and data modernization, cloud migration, cost optimization.	27.8 *(28.0)*
Manufacturing	2,494 *(2,154)*	15.8	• IT infrastructure modernization, cloud enablement, cybersecurity. • Plant safety, remote asset management, energy efficiency and decarbonization. • Supply chain resilience, process resilience. • Utilities invested in connected ecosystems, smart grids and front-end digital investments to enhance customer experience.	30.1 *(28.2)*
Life Sciences and Healthcare	2,744 *(2,291)*	19.8	• COVID-19 initiatives, connected labs, clinical trials, connected instruments, digital surgery and health.	30.0 *(30.9)*
Others	2,006 *(1,753)*	14.4	• Digital marketing and analytics, mergers, acquisitions and divestitures, digital workplace transformation, ERP modernization, cloud transformation, intelligent automation, data democratization, analytics and insights, cyber security. • IT operating model transformation, Agile & DevOps, vendor consolidation.	20.7 *(22.9)*

Business Outlook

Global growth is expected to moderate from 6.1% in 2021 to 3.6 percent in 2022[5], driven by withdrawal of monetary accommodation in major economies, continued supply side shortages and economic damage from the war in Ukraine. While enterprise spending on technology is expected to go up, growth is expected to moderate year on year at an industry level, leaving space for outperformance through market share gains and strong deal wins. Key themes expected to drive client spending, and continued business momentum for the company in FY 2023, include:

- **G&T Themes:**
  - **Customer Experience:** Continued focus on strengthening and deepening customer relationships through digital channels, reimagination of omnichannel journeys, immersive device-agnostic experiences using XR / Metaverse, and hyper-personalization.
  - **Product Innovation:** Accelerated spending on servitization to provide a connected experience and enable new business models.
  - **Sustainability**: New products and services aligned to the sustainability / SDG agenda, new systems to measure, track and reduce GHG emissions across the value chain towards Net Zero goals.
  - **Others:** Employee experience; B2B2C / D2C; M&A; supply chain modernization for better visibility, agility and resilience; purpose-driven, collaborative ecosystems to launch new offerings and new business models; smart manufacturing with greater automation, digital twins and predictive maintenance; industry transformation.
- **Technology:** Cloud migration; digital workplace; data estate and application modernization; cyber security; ERP modernization; low-code, no-code adoption; 5G/Edge adoption.
- **Operations:** AI/ML-led transformation of IT / business operations for greater resilience and leaner operating models; managed services models.

Enterprise Risk Management

While the world and businesses are recovering from the impact of the COVID-19 pandemic of the last two years, new external and internal risks continue to challenge businesses in every possible way amplifying existing risks. Not only are the nature of risks evolving, but the speed of risk is increasing with faster time to impact. Geo-political situations like the Russia Ukraine war have further forced global businesses to revisit their operations, delivery, supply chains and contractual aspects. Operating in an uncertain and ever-changing environment, TCS' global operations bring in considerable complexities and TCS' robust enterprise risk management framework aids in ensuring the strategic objectives are achieved. This framework enables risk identification, risk assessment, risk response planning and actions, risk monitoring and overall risk governance. Key Risk Indicators are used to identify and assess risks. The digital platform for integrated risk management provides an enterprise-wide view of risks covering strategic, operational, compliance, financial and catastrophic risks, providing a holistic approach towards informed decision making. Risks are assessed and managed at various levels with a top-down and bottom-up approach covering the enterprise, the business units, the geographies, the functions, the customer relationships and projects.

[5] *World Economic Outlook, IMF, April 2022*

Listed below are some of the key risks, anticipated impact on the company and mitigation strategies.

Key Risks	Impact on the Company	Mitigation
Volatile global political and economic scenario	The company derives a material portion of its revenues from customers' discretionary spending which is linked to their business outlook. Geo-political disruptions such as the war in Ukraine and resultant volatility in the global economy, or trade wars may adversely affect that outlook resulting in reduced spending which could restrict revenue growth opportunities. This could also result in steep inflation globally which could impact client spending as well as increase TCS' cost of doing business. Additionally, there could be higher risk to service delivery, business continuity, cybersecurity, sanctions compliance and human rights risks in geo-politically sensitive zones.	• Broad-based business mix, well diversified across geographies and industry verticals. • Monitor changing geopolitical scenarios, the potential business implications and strengthen internal controls to further safeguard against secondary risks. • Offerings and value propositions targeting all stakeholders (in addition to the CIO) in the customer organization, covering discretionary as well as non-discretionary spends, and relevant at every point in the business cycle. • Participate in the customer's growth and transformation initiatives through services and offerings including advisory services, migration and modernization of applications and workplace transformation using location independent agile, deep contextual knowledge and data-driven analytics and dashboards. • Proactively investing in infrastructure and resourcing to satisfy anticipated customer demand for flexible products and platforms based solution offerings and subscription-based services to gain market share and new clients and markets. • More long-term contracting models. • Leverage business ecosystem through collaboration with partners, start-ups and alliances to participate in transformation initiatives of customers.

Key Risks	Impact on the Company	Mitigation
Disruption and uncertainty in business due to the COVID-19 pandemic	While presently the severity of the disease due to COVID-19 has reduced because of increased vaccination, as immunity may wane over a period of time, there is a risk of further waves and emergence of highly transmissible and more virulent variants. This may have an impact on the health and safety, emotional wellbeing and mobility of TCS' workforce, which in turn may impact service delivery and revenues. If large numbers of employees are affected, it could result in business disruption and necessitate higher spends for ensuring business resiliency. There could be hesitation to come back to office in the near future from employees who have been working remotely from their hometowns.	• Encourage new employees to get vaccinated as per the country level internal vaccination policies, government guidelines and including facilitating booster doses as available. • Employee well-being initiatives like 24*7 dedicated helpline for employees to address COVID-19 related help, queries for emotional support, interactive sessions, counseling services (TCS Cares), medical hotline to doctors, fitness sessions for employees and Covid Care Centres in TCS premises. • Enable employees to return to office while providing flexibility through the hybrid work model using Secure Borderless WorkSpaces (SBWS™) for remote working, while following safe protocols like masks and social distancing in offices. • Leverage emerging technology based tools to anticipate and be resilient for any upcoming COVID-19 waves / variants. • The COVID-19 Apex committee at Enterprise level continues to monitor the residual risks and coordinate global efforts required, based on frequent risk assessments. • Regular communication with customers about measures taken to maintain business services and reporting of their operations status. • Regular coordination with key suppliers for expeditious provisioning of assets critical for business services.

Key Risks	Impact on the Company	Mitigation
		• SOP for operating TCS Offices including implementing Safe Operating Zones for associates requiring to work from office, thermal screening, frequent sanitization of premises, social distancing layout etc. AI-based Workplace resilience tool implemented in Delivery Centres to aid in risk profiling and contact tracing. • Revised Business Continuity plans which are benchmarked against ISO 22301 in place, for hybrid mode of working and to address any future waves of the pandemic. • Remote working practices for managers and employees integrated into the Location Independent Agile delivery method, to ensure effectiveness and productivity. • Monitor changes in regulations related to the impact due to pandemic and align internal policies accordingly.
Talent risk due to huge demand for talent globally and attrition	The company's ability to attract, develop, motivate, and retain talent is critical to business success. Increase in attrition can impact TCS' ability to deliver existing business engagements and grow. Inability to attract experienced professionals with niche digital skills from the market, can also impact TCS' ability to grow.	• Commitment to organic talent development, best in class learning and development, linkage of career growth to learning, and preference to internal talent for new leadership positions, all incentivize planning of longer-term careers in TCS. • Focused tactical initiatives to retain talent using proactive as well as reactive initiatives; increased employee engagement. • Leveraging top employer brand and social networking sites and talent sourcing channels to tap into the passive pool. • Reducing talent acquisition cycle time to improve joining rates through innovative practices. • Upskill or cross-skill employees to improve competencies. • Engaging in various markets through investments in STEM/GoIT programs, building local talent, building reputation locally to attract talent, campus engagements, etc.

Key Risks	Impact on the Company	Mitigation
Restrictions on global mobility, location strategies	Distributed software development models require the free movement of people across countries and any restrictions in key markets pose a threat to the global mobility of skilled professionals. Restrictions on mobility due to the pandemic or geo-political developments, or due to legislations which limit the availability of work visas or which apply onerous eligibility criteria or costs leading to project delays and increased expenses.	• Ongoing monitoring of the global environment, working with advisors, partners and governments. • Material reduction in dependency on work visas through increased hiring of local talent including freshers, use of contractors, local mobility and training in all major markets. • Leveraging the SBWS™ model to source talent from anywhere and deliver from anywhere. Use of Location Independent Agile to promote systematic collaboration and reduce the need for co-location. • Active engagement in Science, Technology, Engineering and Math (STEM) initiatives designed to structurally increase the availability of engineering talent in major markets. • Greater brand visibility through event sponsorships, community outreach, showcasing of investments, innovation capabilities and employment generation. • Increased outreach to government stakeholders, trade bodies, think tanks and research institutes.
Business model challenges	Rapidly evolving technologies are changing technology consumption patterns, creating new classes of buyers within the enterprise, giving rise to entirely new business models and therefore new kinds of competitors.	• Investments in building scale and differentiated capabilities on emerging technologies through large scale reskilling, external hiring, research and innovation, solution development and IP asset creation leveraging deep contextual knowledge across customer specific domain, technologies and processes. • Establishment of focused business service units providing end-to-end transformational and operational solutions on leading cloud technology platforms spanning advisory, migration and modernization and support of applications.

Key Risks	Impact on the Company	Mitigation
	The COVID-19 pandemic has resulted in a major acceleration of technology investments by customers to make themselves future-proof and also to power the revival of their business. This is resulting in increased demands on the company's agility to keep pace with the rapidly changing customer expectations. Failure to cope may result in loss of market share and impact business growth. There is also increased focus on vendor consolidation and corporate restructuring and mergers and acquisitions in some customer industries.	• Staying relevant to customers by constantly launching new service practices and technology solutions including a new AI-Powered business command solution to help firms assess risk profiles and protect employees returning to offices and modernizing existing offerings and solutions. • Develop capabilities in organization divestiture and integration planning to cater to Merger and Acquisition induced demand for advisory and business consolidation related services. • Thought leadership by propagating the Business 4.0 framework leveraging the Machine First Delivery Model (MFDM™). Develop industry-specific best practices and Artificial Intelligence led products to enable customers derive greater business value and discover opportunities to transform and grow their businesses. • Implement Location Independent Agile methods to mitigate location constraints and pricing and margin pressures. • Constant scouring of the technology landscape through alliance partnerships, and strong connections in academia and the start-up ecosystem to spot new trends and technologies and launch offerings around them. • Enhancing ability to craft and win large deals. • Go to market solutions by working along with partners and alliances, to enable faster transformation turnaround times for clients.
Currency volatility	Volatility in currency exchange movements results in transaction and translation exposure. TCS' functional currency is the Indian Rupee. Appreciation of the Rupee against any major currency could impact the reported revenue in Rupee terms, the profitability and also result in collection losses.	• TCS follows a currency hedging policy that is aligned with market best practices, to limit impact of exchange volatility on receivables, forecasted revenue and other current assets and liabilities. • Hedging strategies are decided and monitored periodically by the Risk Management Committee of the Board convened on a regular basis.

Key Risks	Impact on the Company	Mitigation
Breach of data protection laws	The focus on data privacy and protection of personal data has increased significantly over the last few years. Legislations like GDPR in Europe carry severe consequences for non-compliance or breach. Many other countries have enacted or are enacting their Data Privacy regulations to ensure protection of personal data. Violation of data protection laws or security breaches can result in substantive liabilities, fines or penalties and reputational impact.	• Global privacy policy covering all geographies and areas of operations, which sets out the privacy principles and guidance for deployment. • Organization structure with the Global Privacy Office to strategise, monitor and guide deployment of data privacy framework across the enterprise. Data Protection Officers and other privacy officers have been appointed for TCS entities as required by local privacy regulations to monitor and drive implementation of data protection principles. Business Privacy Leaders are appointed to deploy compliance to the data privacy framework in all functions and business units. • Privacy Information Management Systems (ISO 27701:2019) adopted and certified. • Continuous monitoring and analysis of changes to regulatory and legal landscape and enhancing the data privacy framework. • Embedding privacy by design and privacy by default principles in development of new or changed internal processes or services or products. Robust and continued governance of personal data processing. • Data protection controls and robust risk response mechanisms in place to protect personal data in the TCS ecosystem and also in the customer engagements. • Industry standard data masking and encryption technologies to protect personal data. • Vendors and third parties contracted with privacy obligations and tracked for compliance based on risk assessment. • Mandatory trainings and workshops on data protection, Privacy by Design and global privacy regulations. Continuous awareness campaigns through blog posts, email broadcasts, gamification, roadshows and online events. • Implementing and maintaining data transfer agreements, where required for the transfer of data across jurisdictions. • Periodic reviews and audits by independent audit firm to verify compliance to obligations in addition to internal audits across the ecosystem.

Key Risks	Impact on the Company	Mitigation
Cyber attacks	Risks of cyber-attacks are forever a threat on account of the fast-evolving nature of the threat. There is also an increased risk due to various pandemic themed cyber threats and attacks due to geo-political drivers. In addition to impact on business operations, a security breach could result in reputational damage, penalties and legal and financial liabilities. **Market Opportunity:** Enterprises are increasing their investments in building cyber resilience to be able to detect and foil intrusion attempts, and limit the impact. This presents an opportunity to expand customer relationships and become the preferred cyber security partner.	• Advanced tools based on AI/ML aiding prevention and detection requirements with quarantine capabilities, including Perimeter security controls with advanced tools, enhanced internal vulnerability detection, data leak prevention tools, defined and tested incident management and recovery process in compliance with industry best practices. • Continued reinforcement of stringent security policies and procedures including enhanced security measures and awareness building to combat pandemic-themed threats like phishing, soliciting for fraudulent causes or charities, suspicious pleas and communication through social media, text or calls. • Close collaboration with Computer Emergency Response Team (CERT) and other private Cyber Intelligence agencies, and enhanced awareness of emerging cyber threats. • Enterprise-wide training and awareness programs on Information Security including the extensively used enterprise-wide communication and collaboration platforms accessed through mobile or desktop channels. • Strict access controls including non-persistent passwords (OTP) for secure access to enterprise applications/network. Special handling of privileged administrator accounts. Rigorous access management on all Cloud deployments. • Encryption of data, data back-up and recovery mechanisms for ensuring business continuity. • Ability to isolate TCS enterprise network from client network and defined escalation mechanisms to handle security incidents in client environment.

Key Risks	Impact on the Company	Mitigation
		• Periodic rigorous testing to validate effectiveness of controls through Vulnerability Assessment and Penetration Testing. • Internal and external audits, red teaming, breach and attack simulation. **Market opportunity** • Investments in building local threat management centers across the world, and the launch of new services and solutions including the Cyber Defense Suite, are helping TCS gain traction in this rapidly growing opportunity.
Non-compliance to complex and changing global regulations	As a global organization, the company has to comply with a complex regulatory landscape across multiple jurisdictions, covering areas such as Employment and Labour, Immigration, Taxation, Foreign Exchange and Export Control, Sanctions, Environment, Health and Safety, Anti-Bribery and Anti-Corruption, Data Privacy and so on. The laws and regulations are continuously evolving, increasing in number and complexity. This has resulted in greater compliance risk and cost of compliance for the company. The fast pace of changes in the regulatory environment requires quick understanding of their implications and adaptation in business operations. Failure to comply could result in penalties, reputational damage and criminal prosecution.	• Deployment of a comprehensive global compliance management framework that enables tracking of changes to applicable laws and regulations across various jurisdictions, including new countries of operations and functional areas. • Operationalizing regulatory requirements through business policies and processes. • Clear accountability for compliance obligations and digitized tracking of such activities with evidence and verification. • Periodic regulatory compliance certification, which is fully digitized enables self-governance and covers compliance across all the locations of the company. • Adequate and effective internal controls to comply with regulations and to keep a check on unlawful and fraudulent activities and internal audits to provide assurance. • Strong focus on fostering ethical and compliance culture; Awareness through web-based compliance training courses for all staff and regular notifications/alerts on regulatory changes communicated to stakeholders. • Strong governance at board, executive and management level through compliance committees and compliance working groups.

Key Risks	Impact on the Company	Mitigation
Intellectual Property (IP) infringement and leakage	Risk of infringement of third-party IPs by TCS may lead to potential liabilities, increased litigation and impact reputation. Inadequate protection of TCS' IP may lead to loss of IP leading to potential loss of ownership rights, revenue and value.	• TCS has established an industry leading IP management framework (IP 4.0) and accordingly has institutionalized frameworks, processes and procedures that address the risk of infringement of third-party IP while ensuring safeguarding of TCS' own IP assets. This strong focus on IP-led growth driven based on the 3P (Patents, Products and Platforms) strategy is contributing significantly towards thinning the competition for TCS. • TCS has established a centralized IP and Software Product Engineering group that strives to build an IP thinking culture and hence covering the IP related awareness aspects effectively. • There is a well-defined (software) asset lifecycle governance framework that incorporates policy guidance and risk mitigation guidelines on IP, Legal, software product engineering and business-related risks. • IP Governance program that ensures that there is right access and right use of TCS IP, customer IP, partner IP, and third-party IP in service and partner engagements. • Other key controls include employee confidentiality agreement, training and awareness for IP protection and prevention of IP contamination and infringement. Digitized system to enable strict controls around movement of people and information across TCS' product teams and customer account teams. • Technology inventions are celebrated in TCS by running special programs such as "Invent & Inspire" wherein top inventors and their invention stories are recognized for their success and impact on business.

Key Risks	Impact on the Company	Mitigation
Litigation risks	Given the scale and geographic spread of the company's operations, litigation risks can arise from commercial disputes, perceived violation of intellectual property rights and employment related matters. TCS' rising profile and scale also makes it a target to litigations without any legal merit. This risk is inherent to doing business across the various countries and commensurate with risk faced by other players similarly placed in the industry. In addition to incurring legal costs and distracting management, litigations garner negative media attention and pose reputation risk. Adverse rulings can result in substantive damages.	• Strengthening internal processes and controls to adequately ensure compliance with contractual obligations, information security and protection of intellectual property. • Improved governance and controls over immigration process /increasing localization and sensitization of business managers. • Potential disputes are promptly brought to the attention of management and dealt with appropriately. • Team of in-house counsels in all major geographies and a network of reputed global law firms in countries it operates in. • Robust mechanism to track and respond to notices as well as defend the company's position in all claims and litigation.
Sustainability Risks - Climate change and Environmental aspects	Growing scientific evidence indicates that extreme weather conditions like intense winter storms, rainfall, cyclones, droughts, are attributable to climate change. As a result of changing weather and seasonal patterns, there are also increasing cases of seasonal diseases, epidemics and pandemics besides threat to human safety and business disruption. With globally distributed operations, the company faces physical risks to life and property due to extreme weather events; transition risks resulting from disruptions in the market and emerging regulations; disruptions to operations due to water scarcity; risks of	• An environmentally sustainable approach is adopted by creating green policies, processes, frameworks and infrastructure. All TCS Centers globally continue to be certified under the ISO14001:2015 Environment Management Standard. • Delivery centers designed to withstand extreme weather events. Business Continuity plans tested periodically to ensure effectiveness. • Green buildings, efficient operations, green IT, the use of renewable energy to reduce carbon footprint; adoption of newer technologies and methods to manage waste in line with circular economy principles. • Operational and engineering controls to minimize freshwater consumption, upgradation of water infrastructure and more water efficient systems. • Water management through sewage treatment, recycling of treated water and rainwater harvesting.

Key Risks	Impact on the Company	Mitigation
	inadvertent non-compliance to emerging regulatory requirements around circular economy, e-waste and solid waste regulations, impacting health and safety in local communities, business disruption and reputational damage. **Market dimension and opportunity:** • There is also a commercial opportunity to participate in customers' climate change mitigation journey by leveraging TCS' core competencies. • As TCS moves towards its net-zero goal by 2030, being a socially responsible and purposeful organization brings opportunities to attract young talent.	• Supply Chain sustainability through responsible sourcing. • Year-round associate engagement on environmental awareness and sensitizing them towards nature and conservation of resources. • Initiatives like TCS Circle4Llife™ and sustainathons to come up with technology-led innovations to safeguard environment. **Market dimension and opportunity**: • As enterprises look to reduce their own carbon footprint and cater to the growing demand more environmentally friendly products and services, it opens up new business opportunities for TCS to provide technology-led solutions to help them realize their green plans. • Key solution areas include designing sustainability strategy, sustainability innovation, sustainable consumer analytics and sustainable dashboards. • Additionally, TCS products and solutions such as TCS Clever Energy™, Envirozone™, ESG integration Solution, help customers accelerate their sustainability journeys.

Internal Financial Control Systems and their Adequacy

TCS has aligned its current systems of internal financial control with the requirement of Companies Act 2013, on the lines of the globally accepted risk-based framework issued by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. The Internal Control – Integrated Framework (the 2013 framework) is intended to increase transparency and accountability in an organization's process of designing and implementing a system of internal control. The framework requires a company to identify and analyze risks and manage appropriate responses. The company has successfully laid down the framework and ensured its effectiveness.

TCS' internal controls are commensurate with its size and the nature of its operations. These have been designed to provide reasonable assurance with regard to recording and providing reliable financial and operational information, complying with applicable statutes, safeguarding assets from unauthorized use, executing transactions with proper authorization and ensuring compliance with corporate policies. TCS has a well-defined delegation of power with authority limits for approving contracts as well as expenditure. Processes for formulating and reviewing annual and long-term business plans have been laid down. TCS uses a state-of-the-art enterprise resource planning (ERP) system that connects all parts of the organization, to record data for accounting, consolidation and management information purposes. It has continued its efforts to align all its processes and controls with global best practices.

TCS management assessed the effectiveness of the company's internal control over financial reporting (as defined in Regulation 17 of SEBI LODR Regulations 2015) as of March 31, 2022.

B S R & Co. LLP, the statutory auditors of TCS have audited the financial statements included in this annual report and have issued an attestation report on the company's internal control over financial reporting (as defined in section 143 of Companies Act 2013).

TCS has appointed Ernst & Young LLP to oversee and carry out internal audit of its activities. The audit is based on an internal audit plan, which is reviewed each year in consultation with the statutory auditors and approved by the audit committee. In line with international practice, the conduct of internal audit is oriented towards the review of internal controls and risks in the company's operations such as software delivery, accounting and finance, procurement, employee engagement, travel, insurance, IT processes, including most of the subsidiaries and foreign branches.

TCS also undergoes periodic audit by specialized third party consultants and professionals for business specific compliances such as quality management, service management, information security, etc. The audit committee reviews reports submitted by the management and audit reports submitted by internal auditors and statutory auditors. Suggestions for improvement are considered and the audit committee follows up on corrective action. The audit committee also meets TCS' statutory auditors to ascertain, inter alia, their views on the adequacy of internal control systems and keeps the board of directors informed of its major observations periodically.

Based on its evaluation (as defined in section 177 of Companies Act 2013 and Regulation 18 of SEBI LODR Regulations 2015), TCS' audit committee has concluded that, as of March 31, 2022, the company's internal financial controls were adequate and operating effectively.

Awards and Accolades

Intellectual Capital

- Recognized for **Best Patents Portfolio** in the Large Enterprise category at the **Confederation of Indian Industry Industrial Intellectual Property Awards 2021**.
- Won the **2021 ASSOCHAM IP Excellence Award** for pioneering efforts in facilitating innovations and creating a healthy intellectual property (IP) ecosystem.
- TCS **CodeVita** awarded a **Guinness World Records™ title** as the world's largest computer programming competition with 136,054 participants from 34 countries.
- Awarded **Best Technical Implementation for AI** at the 5th Global Annual Achievement Awards for Artificial Intelligence for re-imagining pharmacovigilance by applying machine vision, artificial intelligence, smart analytics and IoT to automate the intake, processing and analysis of safety cases.
- TCS Optumera™ won the **Best Self Aware Strategic Planning Product** at the **2021 AI Excellence Awards** for continuously monitoring thousands of customer-, market-, and vendor-behaviors; model scenarios and customer behavior to enable businesses in making AI-enabled integrated decisions.
- Won the **Artificial Intelligence Breakthrough Award** in the category **Best AI-based Solution – Retail** for TCS Optunique™ for its ability to deliver unified and contextualized experiences across the omnichannel journey by evaluating customer intent in real time.
- TCS Optunique™, awarded the **Best Theory of Mind Machine Learning Product** at the 2021 AI Excellence Awards for its ability to drive unified personalized experiences across the omnichannel journey.
- TCS' Data Marketplace Solution for COVID-19 awarded at the **19th Asian IT Leadership Awards 2021** under the **Best Use of IT in Healthcare** category.
- Recognized as an **'Innovator'** at **NASSCOM AI Gamechangers 2021** in the Use of AI for Public Services Category for its innovative AI-based Sanitation Inspection system.
- Won **4 Stevie awards** for innovation and IP at the International Business Awards 2021:
    - Gold Stevie for **'Most Innovative Tech Company'** in the 'more than 2500 employees' category.
    - Gold Stevie for TCS TwinX™ in the **Business Technology Solution category – AI/ML solution.**

- Silver Stevie for TCS Omnistore™ in the **Business Technology Solution category – Emerging Technology.**
- Bronze Stevie for TCS' Data Exchange Platform in the **Most Valuable Technical Innovation – COVID-19 Response** category.

- Awarded the **Enterprise Blockchain Award 2021** by the Blockchain Research Institute.
- Won two awards at the **IoT Global Awards 2021**: for **TCS DigiFleet™** in the Automotive, Transport and Travel category and for **TCS Smart Store** in the Retail, Marketing and Hospitality category.
- TCS ADD Regulatory platform won the **India Pharma Awards 2021** in the category of **Excellence in Ancillary Pharma Services**.
- Two TCS-built solutions featured in the **2021 ISG Digital Digital Case Study Awards**: TCS' **Digital Twin Platform for Saipem** won the Energy and Utilities Standout Award as well as the Southern Europe regional standout award; the TCS' **digital transformation work for Shell** won the ANZ regional standout award.
- **TCS TwinX** won the **2022 AI Excellence Award** under the Product category.
- TCS' PredictCX won **'Most Innovative Best Practice'** Award under the customer experience category at the **CII DX Awards 2021**.
- TCS' Risk Analytics Solution won **Best Data Science Solution Award** at the A-Team Group's **Data Management Insight Awards 2021.**
- TCS' **Digital Platform for Next-Generation Agriculture Services** (DNA) won the award for **Excellence in IT Services** for Large Enterprise at the IMC Digital Technology Awards, 2020 for seamlessly bringing together knowledge, actionable insights, farm-input sources, and commerce centers to bridge demand-supply and holistically address problems in the agricultural supply-chain ecosystem.
- Won **6 Stevies®** – 5 gold and 1 silver – at the **2021 Asia-Pacific Stevie Awards** for driving innovation in finance, human resources, and technology, igniting organization-wide transformation, and quickly addressing the requirements of operating during COVID-19.

Human Capital

- Won the award for **'Role Model in HR Excellence'** at the **12th CII National HR Excellence Awards**.
- Ranked **#1** in the **LinkedIn Top Companies** list of the best workplaces for career growth in India. TCS topped the list in measures of ability to advance, skills growth, company stability, external opportunity, company affinity, gender diversity and spread of educational backgrounds.
- Recognized as **2022 Global Top Employer** for the seventh year in a row by the **Top Employers Institute.**
- Won 3 awards at the **2021 LinkedIn Talent Awards India** in the categories: **Best Employer Brand on LinkedIn, Best Culture of Learning**, and **Diversity Champion**.
- Recognized at the **Wequity Awards 2022** in **"The Equalizer" category** for empowering women technologists, creating a gender-neutral workplace and persistently driving diversity, equity, and inclusion initiatives.
- Won the **National HRD Network's Gold Award** for **Excellence in Performance Management Process and Technology.**
- Xcelerate won Gold in the **HR Excellence Awards** for best HR Technology Strategy.
- Listed among the top **25 Best Big Companies to Work For** in the UK and among the **Best Companies** in the consultancy sector by the Best Companies organization for prioritizing

the health and wellness of its employees and investments in organic talent development.

- Won the **ATD Best of Best Award** for **HR and Talent Development Ecosystem and Innovations.**
- Won a **Gold Stevie** for **Best use of People Analytics** and **Talent Management and Transformation.**
- Ranked #3 in BT-Taggd survey of the **Best Companies to Work For** in India.
- Won **5 awards** at the **Economic Times Human Capital Awards**, in the categories: Excellence in Communication Strategy, Excellence in Creating a Culture of Continuous Learning and Upskilling, Excellence in Fostering Innovation and Design Thinking, Excellence in HR Digital Transformation and Excellence in Recruitment of Professionals.
- Won **14 Gold Medals**, **3 Silvers** and **3 Bronzes** at the **2021 Brandon Hall Group Excellence in Learning Awards**, across Leadership Development (4 Golds), Learning & Development (3 Golds, 2 Silvers), Diversity, Equity and Inclusion (3 Golds, 1 Silver), Talent Acquisition (2 Golds, 1 Bronze), Talent Management (1 Gold, 1 Bronze), Workforce Planning & Management (1 Gold) and Sales Training (1 Bronze).

Relationship Capital

BRAND BUILDING

- Recognized by **Brand Finance** as the **second most valuable brand** in IT services globally, moving up one place in 2021. TCS' new brand articulation 'Building on Belief' has resonated strongly with customers and helped the company expand its participation in their growth and transformation initiatives.
- Named a **UK Superbrand** for the seventh consecutive year in recognition of TCS' exceptional business growth, its position as the top strategic IT player by revenue in the UK, its number one ranking in customer satisfaction, and its community initiatives.
- Recognized as a **Superbrand** in Singapore for its strong market reputation, digital initiatives and business growth.
- Awarded two Diamond awards at the **2021 ITSMA Marketing Excellence Awards** in the categories – **Embedding ABM Programs** and **Orchestrating Executive Engagement.**
- Won 3 gold and 2 bronze **Eventex Awards** for its ThisRun campaign and the Virgin Money London Marathon Event App, as well as for excellence across marketing and customer engagement.
- Won the **2021 Economic Times Best Brand of UAE** award for brand reputation in the Middle East region.

CUSTOMER

- Ranked **#1 in customer satisfaction** across Europe, for the **ninth consecutive year**, in the largest independent survey of 1,800 CxOs from top IT spending organizations in Europe by Whitelane Research. TCS was ranked #1 in UK, France, Netherlands, BeLux, Switzerland, Sweden, Norway and Finland.
- Won **3** awards in partnership with clients at the **DevOps Excellence Awards 2022** in UK for **Best Automation Project** (with Aviva), **Best Use of Compliance as Code** (with Nationwide Building Society) and **Best Use of Microservices/Containers** (with Lloyds Banking Group).

INVESTOR RELATIONS

- Ranked **#2 Most Honored Company in Asia** (ex-China) for bagging several top rankings in the Technology / IT Services & Software sector in **Institutional Investor's 2021 All-Asia (ex-Japan) Executive Team** rankings based on a survey of 4,084 investment professionals at 1,285 financial services firms across Asia. Top rankings included **Best IR Professional (#1), Best IR Program (#2)**, and **Best ESG (#2)**.

- Recognized by **Institute of Chartered Accountants of India** with a **Gold Shield Award** for **Excellence in Integrated Reporting in Service Sector** at the **ICAI Sustainability Reporting Awards 2020-21.**

INDUSTRY ANALYST

- Ranked the **#1 Engineering Services PEAK Matrix Provider of the Year 2022** by **Everest Group** for the highest consolidated score across five engineering services PEAK Matrix evaluations published in 2021, in each of which TCS was ranked a Leader.

- TCS was ranked a Leader in **92 competitive assessments published by leading research firms in FY 2022** (86 in FY 2021):

Firm	Report type	Title
Q4		
Everest Group	PEAK Matrix	Multi-Process Human Resources Outsourcing (MPHRO) Services PEAK Matrix® Assessment 2022
HFS	Top 10	HFS Energy Transition Services Top 10 Snapshot, 2022
ISG	Lens	ISG Provider Lens™ Salesforce Ecosystem Partners
IDC	MarketScape	IDC MarketScape: European Professional Services for Data-Driven Transportation 2022 Vendor Assessment
NelsonHall	NEAT	P&C Operations Transformation 2022
Everest Group	PEAK Matrix	Intelligent Process Automation (IPA) – Solution Provider Landscape with PEAK Matrix® Assessment 2022
IDC	MarketScape	IDC MarketScape: Worldwide Life Science Sales and Marketing IT Outsourcing Services 2022 Vendor Assessment
Everest Group	PEAK Matrix	Digital Product Engineering Services PEAK Matrix® Assessment 2022: Breaking the Chasm between the Physical and Digital Worlds
Everest Group	PEAK Matrix	Artificial Intelligence (AI) Services PEAK Matrix® Assessment 2022
HFS	Top 10	HFS Top 10: Insurance Services, 2022
Everest Group	PEAK Matrix	Oracle Cloud Applications (OCA) Services PEAK Matrix® Assessment 2022 – Global
NelsonHall	NEAT	Quality Engineering 2022
Everest Group	PEAK Matrix	Digital Interactive Experience (IX) Services PEAK Matrix® Assessment 2022
Gartner	Magic Quadrant	Magic Quadrant for Outsourced Digital Workplace Services
Gartner	Magic Quadrant	Magic Quadrant for Global Retail Core Banking
NelsonHall	NEAT	Digital Banking 2022
Gartner	Magic Quadrant	Magic Quadrant for Data and Analytics Service Providers
Everest Group	PEAK Matrix	Mortgage Operations PEAK Matrix® Assessment 2022
HFS	Top 10	HFS Top 10: Retail and CPG Services, 2022
ISG	Lens	ISG Provider Lens™ Life Sciences Digital Services
ISG	Lens	ISG Provider Lens™ Healthcare Digital Services
ISG	Lens	ISG Provider Lens™ AWS - Ecosystem Partners
HFS	Top 10	HFS OneOffice™ Services Top 10: Digital transformation in action
HFS	Top 10	Utilities Services Top 10, 2022

Firm	Report type	Title
Q3		
Everest Group	PEAK Matrix	Enterprise Blockchain Services PEAK Matrix® Assessment 2022
Everest Group	PEAK Matrix	Cloud Services PEAK Matrix® Assessment 2022 – Europe
Everest Group	PEAK Matrix	Cloud Services PEAK Matrix® Assessment 2022 – North America
Everest Group	PEAK Matrix	Digital Workplace Services PEAK Matrix® Assessment 2022
HFS	Top 10	HFS Top 10: Enterprise Blockchain Services, 2021
Everest Group	PEAK Matrix	Advanced Analytics and Insights (AA&I) Services PEAK Matrix® Assessment 2022
Everest Group	PEAK Matrix	Supply Chain Management (SCM) BPS – Service Provider Landscape with PEAK Matrix® Assessment 2022
HFS	Top 10	HFS OneOffice Services Top 10: People and Process Change
Everest Group	PEAK Matrix	Life and Pensions (L&P) Insurance BPS/TPA – Service Provider Landscape with PEAK Matrix® Assessment 2022
NelsonHall	NEAT	Advanced Digital Workplace Services 2021 - NEAT
HFS	Top 10	HFS Top 10: Life Sciences service providers, 2021
HFS	Top 10	HFS Top 10: Internet of Things (IoT) Service Providers 2021
Everest Group	PEAK Matrix	Internet of Things (IoT) Supply Chain Solutions PEAK Matrix® Assessment 2022
HFS	Top 10	HFS Energy Services Top 10, 2021
Zinnov	Zones	Zinnov Zones 2021 - Engineering R&D Services (Overall)

Firm	Report type	Title
Zinnov	Zones	Zinnov Zones 2021 - IoT - Internet of Things Technology Services (Overall)
Everest Group	PEAK Matrix	Mainframe Services PEAK Matrix® Assessment 2022
Everest Group	PEAK Matrix	Healthcare Analytics Services PEAK Matrix® Assessment 2022
NelsonHall	NEAT	Life, Annuities & Pension: Operational Transformation 2021
HFS	Top 10	HFS Pega Service Providers Top 10 2021
HFS	Top 10	HFS OneOffice™ Services Top 10: Data and Decisions
IDC	MarketScape	IDC MarketScape: Worldwide Oil and Gas Upstream Asset Management Digital Services 2021 Vendor Assessment
Everest Group	PEAK Matrix	Enterprise Quality Assurance (QA) Services PEAK Matrix® Assessment 2022
HFS	Top 10	HFS OneOffice Services Top 10: Native Automation
Everest Group	PEAK Matrix	Banking Operations – Services PEAK Matrix® Assessment 2022
IDC	MarketScape	IDC MarketScape: Worldwide Managed Multicloud Services 2021 Vendor Assessment
NelsonHall	NEAT	Digital Manufacturing Services 2021
Everest Group	PEAK Matrix	Software-Defined Wide Area Network (SD-WAN) Services PEAK Matrix® Assessment 2021
Q2		
Everest Group	PEAK Matrix	Envisioning the Connected Future: 5G Engineering Services PEAK Matrix® Assessment 2021
IDC	MarketScape	IDC MarketScape: Worldwide B2B Commerce Services for Industrial Manufacturing 2021 Vendor Assessment

Firm	Report type	Title
ISG	Lens	ISG Provider Lens™ Utilities Industry - Services and Solutions -
NelsonHall	NEAT	Wealth & Asset Management Services 2021
Everest Group	PEAK Matrix	Finance and Accounting Outsourcing (FAO) – Service Provider Landscape with PEAK Matrix® Assessment 2021
IDC	MarketScape	IDC MarketScape: Worldwide Life Science R&D ITO Services 2021 Vendor Assessment
IDC	MarketScape	IDC MarketScape: Worldwide Life Science R&D Strategic Consulting Services 2021 Vendor Assessment
Everest Group	PEAK Matrix	Procurement Outsourcing (PO) – Service Provider Landscape with Services PEAK Matrix® Assessment 2021
Everest Group	PEAK Matrix	Exploring the Future of Mobility: Autonomous, Connected, Electric, and Shared (ACES) Mobility Automotive Engineering Services PEAK Matrix® Assessment 2021
IDC	MarketScape	IDC MarketScape: Worldwide Life Science R&D BPO Services 2021 Vendor Assessment
Avasant	RADAR	Avasant Higher Education Digital Services 2021–2022 RADARVIEW™
IDC	MarketScape	IDC MarketScape: Worldwide Artificial Intelligence IT Services 2021 Vendor Assessment
IDC	MarketScape	IDC MarketScape: Asia/Pacific (Excluding Japan) Managed Cloud Services 2021 Vendor Assessment
Gartner	Magic Quadrant	Magic Quadrant for Data Center Outsourcing and Hybrid Infrastructure Managed Services, Global

Firm	Report type	Title
NelsonHall	NEAT	Procurement Transformation 2021
Everest Group	PEAK Matrix	Network Transformation and Managed Services PEAK Matrix® Assessment 2021
Forrester	Wave	The Forrester Wave™: Application Modernization And Migration Services, Q3 2021
Forrester	Wave	The Forrester Wave™: Continuous Automation And Testing Services, Q3 2021
Everest Group	PEAK Matrix	Capital Markets Operations – Services PEAK Matrix® Assessment 2021
Everest Group	PEAK Matrix	Data and Analytics (D&A) Services PEAK Matrix® Assessment 2021
IDC	MarketScape	IDC MarketScape: European Smart Manufacturing Service Providers 2021 Vendor Assessment
HFS	Top 10	Banking and Financial Services – The Best of the Best Service Providers 2021
Q1		
Everest Group	PEAK Matrix	Application and Digital Services in Banking PEAK Matrix® Assessment 2021: Global and Europe Focus
Everest Group	PEAK Matrix	Application Transformation Services PEAK Matrix® Assessment 2021
Everest Group	PEAK Matrix	Life Sciences Operations – Services PEAK Matrix® Assessment 2021
HFS	Top 10	HFS Top 10 Supply Chain Service Providers
Gartner	Magic Quadrant	Magic Quadrant for SAP S/4HANA Application Services, Worldwide
IDC	MarketScape	IDC MarketScape: Asia/Pacific Cloud Security Services 2021 Vendor Assessment Study

Firm	Report type	Title
IDC	MarketScape	IDC MarketScape: Worldwide Artificial Intelligence Business Services 2021 Vendor Assessment
Everest Group	PEAK Matrix	IT Managed Security Services PEAK Matrix® Assessment 2021
NelsonHall	NEAT	CX Services in BFSI 2021
IDC	MarketScape	IDC MarketScape: Worldwide Smart Manufacturing Service Providers 2021 Vendor Assessment
Chartis	Market Quadrants	GRC Solutions: RiskTech Quadrant® for conduct and control solutions, 2021
Chartis	Market Quadrants	GRC Solutions: RiskTech Quadrant® for GRC analytics, 2021
Chartis	Market Quadrants	GRC Solutions: RiskTech Quadrant® for MRM solutions, 2021
IDC	MarketScape	IDC MarketScape: Worldwide Artificial Intelligence Services 2021 Vendor Assessment
IDC	MarketScape	IDC MarketScape. Asia/Pacific Intelligent Automation Services 2021 Vendor Assessment
Everest Group	PEAK Matrix	S/4HANA Services PEAK Matrix® Assessment 2021
NelsonHall	NEAT	Cognitive & Self-Healing IT Infrastructure Management Services 2021
HFS	Top 10	HFS TMT (Telecom, Media, and Technology) Service Providers Top 10 2021

PARTNER

- Won over **30** awards from technology alliance partners:
  - 2020 **Google Cloud Breakthrough Partner of the Year** for demonstrating innovative thinking, outstanding customer service, and best-in-class use of Google Cloud products and solutions.
  - Two 2021 **Microsoft Partner of the Year** Awards – Azure Intelligent Cloud in France and Dynamics 365 Field Service in the US, for demonstrating excellence in innovation and providing outstanding solutions and services based on Microsoft technology.
  - Named to the **Microsoft Business Applications 2021/2022 Inner Circle**, for the high standard of excellence in building innovative solutions that help customers achieve their growth and transformation objectives.
  - **Application Transformation and Migration Partner of the Year** at the **AWS Partner Awards** in Australia and New Zealand.
  - **Consulting Winner** along with customer Stellantis (formerly Fiat Chrysler Automobiles) for Marketing Cloud at **Salesforce Partner Innovation Awards 2021**.
  - Solutions implemented by TCS for SAIL and Trent won the **SAP ACE Awards 2021** in the **Manufacturing Transformation** and **Game Changer** categories respectively.
  - Won **SAP EMEA North Award** for **Service Partner Excellence 2022** for **Integrated Delivery Experience**.
  - **Automation 360 Cloud Partner** from Automation Anywhere in India, Middle East & Africa.
  - Won **Automation Anywhere Partner of the Year 2022** awards in the categories **Migration Partner - India**, **Knowledge Partner - India and Americas** and **AARI Solutions Partner - EMEA** at the company's annual Virtual Partner Summit.
  - **LATAM 2021 Partner of the Year** in the Product Sales Leadership category from **Automation Anywhere**.

- Recognized as the **2022 Americas Premier Partner of the Year** by **MuleSoft.**
- **Top Performing - GSI Partner** and **Game Changer - Enterprise Business category** in India and South Asia at the Red Hat Partner Awards.
- **Global Partner of the Year 2020** for Integration and API from **Software AG**.
- **Intel Partner of the Year 2021.**
- **HPE GreenLake Ecosystem Partner of the Year 2021**.
- **Creatio Partner of the Year FY2021 Award of Excellence**.
- **Zscaler's Global Solutions Integrator Partner of the Year 2021**.
- **MongoDB Global System Integrator Partner of the Year** Award for its bold, innovative solutions that accelerate the growth and transformation journeys for businesses across industries.
- **Cohesity GSI Innovation Partner of the Year** FY21, for accelerating innovation and increasing the ease of doing business.
- **Celonis BPO Partner of the Year** at the Celonis Ecosystem Summit 2021.
- **IFS Solutions Partner of the Year** and **IFS Services Partner of the Year (Enterprise Category)** at the 2021 IFS Partner of the Year Awards.
- **BMC Partner of the Year Award – Cognitive Automation** at the BMC Service Provider eXchange (SPeX).
- **2021 Partner of The Year Award** by **Smart Message.**
- **Strong Growth – Identity and Access Management Partner of the Year 2021** by **CyberRes**, a Micro Focus line of business.
- Named the **Ivalua APAC Partner of the Year 2021**.
- Named **International Partner of the Year 2021** by **Ping Identity**.
- Recognized as **GSI Partner of the Year 2021** by **GoTo Partner Network**.
- Named **Qlik's North America System Integrator of the Year**.
- **System Integrator Partner Innovation award** from Qlik.

Social Capital

- Won the **World Leadership Congress Award** for world-class operations at the All-Women Business Process Services and IT Center in Riyadh, Saudi Arabia.
- Won the **Best Indian Investment Award** from the **Indo-French Chamber of Commerce & Industry** for TCS' commitment to the French economy through sustained long-term investments in talent development, innovation, and regional growth.
- TCS' Assisto, an innovative solution developed by TCS Rapid Labs, was awarded **Social Impact Solution of the Year** at the NASSCOM Engineering R&D Awards, 2021 for the use of the cognitive speech algorithms that generate speech output in the tone, mother tongue and near-real sound of the child using it.
- Named in Points of Light's **Civic 50** List for the Fifth Consecutive Year for TCS' commitment to drive social impact of its community engagement programs.
- TCS Bringing Life to Things ™ IoT Lab awarded **CMO Corporate Social Responsibility Award** at CMO Vision and Innovation Awards 2021.

Corporate Social Responsibility

Overview

TCS' vision is to empower people and communities to build self-reliance through technology while promoting the values of fairness, equity and respect for human rights. Its mission is to connect people to opportunities in the digital economy while building equitable, inclusive pathways for all – especially women, youth, and marginalized groups.

TCS has been a signatory to the UN Global Compact (UNGC) since 2006 and is aligned with its ten principles. The Company supports the principles contained in the Universal Declaration of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, and the United Nations Guiding Principles on Business and Human Rights. These principles guide TCS' community initiatives.

The company continues to invest in addressing the most pressing needs of the community, focusing on education, skilling, employability, and digital entrepreneurship with a focus on bridging the opportunity gap for people and communities. It invests in health and wellness, water sanitation and hygiene, conservation, and disaster relief efforts to support the basic needs of communities.

Through its unique engagement model, TCS leverages its intellectual capability, technology expertise, large employee base volunteering their time and skills and of course financial capacity to invest in programs that deliver longer term social impact across the globe.

Its programs are holistic and comprehensive, and designed to be flexible and adaptable, meeting the specific needs of communities and regions around the world. To build capacity of grassroots organizations working in local communities, TCS also invests in strategic partnerships, research, and insights by providing pro-bono technology consulting. This model of engagement allows TCS to empower communities, create generational improvements and build greater futures.

In FY 2022, TCS estimates that its global community initiatives reached more than **1.7 million** beneficiaries, made possible by over **58,900** employees contributing over **700,000** hours of their volunteering time to support local community initiatives.

Mapping of TCS' CSR Programs with SDG Goals

Adult Literacy Program - Creating access to literacy on a path to livelihoods

Despite years of investments, illiteracy continues to be a core impediment stopping individuals from realizing their potential. TCS' Adult Literacy Program, through its digital literacy solution has been addressing this over the past 2 decades in India and West Africa. Women have been a key target group, with the program offering them a path to financial independence and an opportunity to be role models for their children, especially girls, in their families. Till date, over **1.08 million** learners, over **80%** of them women, have benefited from this program. The program runs in over 162 districts across 20 states and union territories across India, and also in Burkina Faso, West Africa.

TCS has further expanded the scope of this program in response to India's new National Education Policy, which emphasizes the need for digital literacy, financial, legal, and electoral literacy, disaster management and environmental literacy in addition to functional literacy, to empower communities. New modules on the platform include financial literacy skills (8-10 hours), digital literacy skills (5-7 hours), citizen entitlement awareness (3-4 hours) and disaster risk reduction awareness (8-10 hours).

In FY 2022, over **7,400** learners gained basic literacy skills.

The impact of this program has been transformational and transgenerational. It is promoting social inclusion, financial stability and economic growth, empowering neo-literates with better access to the financial system, government benefit programs and a greater say in family and community decision-making.

Program outcomes include:

- **81%** of the learners have encouraged their own children especially girls to go to school.
- **75%** learners expressed that their self-esteem has increased because of this program.
- **67%** learners feel that they have started participating more in the decision-making process in their family.

Ignite My Future (IMF) - empowering educators and creating skills of the future

As technology change accelerates, the workforce of tomorrow requires new age skills and capabilities to be productive. Computational thinking is one such futuristic skill that not only provides learners with a problem-solving mindset, but also enables access to high skilled jobs, enabling communities to benefit from the adoption of new technologies. However, there has been limited integration of this skill within classrooms across the globe. Educators that play a key role in creating access are themselves

'Sampa' stands out for her perseverance and dedication, and for showing that self-will and determination triumphs against all odds. When she first approached one of TCS' partner organizations working with individuals with developmental disabilities, she was in her mid-twenties, illiterate and suffering from disorganized thoughts, preoccupation, aggressive behavior and a shattered sense of self.

Introduced to TCS's digital literacy solution ALP, she gradually started taking interest in learning, drawn by the colourful and attractive content. She was seen observing the letters and numbers on her own, and slowly started comprehending them. She took everyone by surprise when the National Institute of Open Schooling results were announced, and she got an A grade.

It took 5 long years to bring her back to a life of self-dignity. Sampa now works in a café run by the partner organization, and is able to handle the finances of the café business and contribute meaningfully.

not empowered to embed this within the learning curriculum.

TCS' **IMF**, implemented **in North America, UK, India, Latin America** and **APAC**, has created global access for educators and students to hone this skill set. Equity and inclusion are integrated in the program design, to specifically enable access for underserved students from marginalized communities.

Scenario-based lesson plans, teacher training and resources, immersive and interactive engagements for families as well as a year-round network of support for educators through the Learning Leaders Program ensures that the program addresses the critical needs of every stakeholder in the learning journey - creating long-term integration of a highly valued skill set. To meet virtual and hybrid learning demands, all aspects of the program were restructured for online delivery, remaining inclusive of communities with varying digital access and tools.

IMF launched its largest Global Innovations Teacher Project to-date with 24 teachers from 5 countries reaching over 500 students. Over 100 TCS employee volunteers supported the 6-week project.

In FY 2022, the program empowered nearly **435,000** students and educators.

Program outcomes include:

- **81% educators** were ready to use resources in their classroom post-training.
- **90% educators** reported they have returned to in-person instruction.
- **$10K+ average** savings to each district and educator from free training.

goIT (go Innovate Together) – Digital Innovation Program for Students

The jobs of tomorrow are changing rapidly. Economies around the world are dealing with the disparity between the needs of employers and the skills that youth possess. According to the National Science Foundation, it is predicted that 80% of the jobs created in the next decade will require some form of math and science skills. The lack of sufficient numbers of students pursuing these streams, and insufficient focus on innovation, problem-solving and creativity in school curricula, are seen as big challenges to the digital economy.

Anne LeBlanc is a middle school teacher at Halifax Regional in Nova Scotia, Canada. Anne uses Ignite My Future resources to make computational thinking come to life for her students, in all core subjects. She and her students have participated in two IMF Global Collaborations through which she has had the opportunity to collaborate with teachers from around the world.

Through this project, that relies on students' using computational thinking to solve a global problem, Anne has found that her classroom gets bigger and the world gets smaller for her students. This project has also been beneficial to one of her French speaking students as he is able to translate his videos and other students' videos allowing collaboration to happen even across language barriers.

"My students have found that through connecting with other students outside of their community they are more alike, than they are different." Anne supports and collaborates with like-minded educators though IMF global network of Learning Leaders.

TCS' flagship digital innovation and career readiness program, **goIT** (go Innovate Together), prepares students with the skills and mindsets to pursue careers of the future. Through engaging design workshops and custom mentorship experiences, goIT benefits students by challenging stereotypes and inspiring future leaders to pursue the careers of tomorrow, most of which will involve STEM and the computer sciences.

goIT uses a four-pronged model of (1) volunteer driven engagements, in-person or virtually, (2) seamless year-round connects via goIT Online, (3) SDG-focused monthly challenges and (4) Custom mentorship experiences designed to introduce student local experts and opportunities. Each prong, layered with partnerships with school districts and mentoring by industry professionals from TCS, makes goIT a unique program that helps students develop core skills that enable them to be productive in the jobs of tomorrow.

After over a decade of success and a footprint of 40 countries, goIT has now benefited over **100,000** students who have designed more than **26,000** tech-for-good digital innovation prototypes.

In FY 2022, more than **30,000** students and educators benefited from this program.

Program outcomes include:

- **87%** students felt they could be computer scientists after their goIT experience.
- **96%** students reported that they gained positive insights from their TCS volunteer mentor.
- **80%** showed an increased interest in STEM and Computer Science.
- **88%** students demonstrated an understanding of how technology can be used to improve their community.

Four learners from Sinenjongo High School in Cape Town, celebrated their win in the goIT Tech-savvy Challenge, hosted by TCS in partnership with Steam education specialist Sakhikamva Foundation.

The event saw more than 455 participants from nine high schools across the Western and Eastern Cape battle it out with their ideas for a winning app that could change their local communities. Eventually, learners from Sinenjongo High and Goodwood College took the top three positions.

The founder of Sakhikamva Foundation, Fatima Jakoet said the foundation was impressed by all the participants of the competition but inspired by learners from Cape Town who worked hard to win the tech challenge.

"What we have seen in this year's South African goIT Challenge is young people expressing their ability to be problem-solvers who can contribute to a better world," said Jaconet.

Speaking about her team's app idea, WO-MEN, Sinenjongo High School learner Lilitha Masizana said: *"We are so happy and excited to have won, and as a team we stand by what our app was designed to do – to promote gender equality and the acceptance of gender diversity, which includes a conversation platform to highlight the impacts of gender inequality."*

Youth Employment Program - connecting India's rural youth to careers in digital economy

TCS' Youth Employment Program (YEP) focuses on one of the biggest challenges in India, which is unemployment, underemployment, and lack of access to high paying jobs among youth. It is estimated that 7 million people are annually added to the workforce, but the education and skills profile of the existing workforce is very poor - especially in rural and semi-urban locations. The pandemic has created an even bigger need to integrate digital and technology related skills within the learning experience to ensure that youth can avail of the jobs that are available in the market.

YEP connects India's youth to careers in the digital economy through the development of competencies in numerical ability, logical reasoning, communication, programming and domain skills. The program also provides career guidance and interview skills to help youth navigate through opportunities available in the market. Over the last two years, the program has gone virtual. The program has:

- Enhanced employability of rural underprivileged youth from socially, economically and geographically disadvantaged communities.
- Provided youth, especially those from historically marginalized and low-income families, with industry-specific experiential learning that improves exposure to the kind of skills and competencies required to make them a highly viable industry resource.
- Ensured continuous availability of highly skilled and cross-functional talent pool for the industry.
- Increased diversity and gender parity within the workforce while creating inclusion and access for marginalized groups across the country.
- Promoted sustained and inclusive economic growth, full and productive employment and decent work.

In FY 2022, more than **19,700** students were trained in India and LATAM, of whom more than **7,400** students gained employment in sectors such as IT and ITeS, Retail, Banking and others. Today, the program runs in 35 States & Union territories across India.

Biki Minj is a young woman who had never seen her father's face. She was brought up by her widowed mother, a tea garden labourer in Darjeeling and a worker in the children's hostel. Biki began picking up English at the age of two, when she and her mother moved into the children's hostel. At Biki's own school, only the local language was used during instruction.

Biki had dreams of attending college after she graduated from high school, but the family could not afford it. Instead, she took up a hospitality management course and joined an airline as ground staff in Kolkata. Unfortunately, the airline went out of business, forcing Biki to look for other work. She ended up in a small town in the Uttar Dinajpur district of West Bengal teaching English in a school for four years.

During that period, she continued her BA studies in IGNOU through distance learning and became a Graduate in English. On a trip to Siliguri, Biki learned about TCS' Youth Employment Program that was about to be launched in the city. She enrolled herself for the training and travelled 30 km every day from her grandmother's house to reach the training centre. Biki worked tirelessly, learning as much as she could during the program and earning recognition from her instructors. Her efforts paid off when she was offered a full-time position at TCS during a recruitment drive in Siliguri.

Since she joined TCS, Biki has been able to experience a freedom she never thought possible. Earning a regular salary allowed her to begin saving money to build a house for herself and her mother, a house that will one day be testimony to a life of independence and self-respect.

Program outcomes include:

- **4X** enhancement in income for individuals from marginalized communities in comparison to elementary occupations.
- **80%** indicated that better jobs led to a change of role as earning member.
- **74%** indicated an enhancement of status in the family and community.

Entrepreneurship and Self-Employment

India has **30% youth unemployment** (15-29 years) compared to a 15% global average, and 325 million Indians are from historically disadvantaged and marginalized communities. Lack of proper technology infrastructure, knowledge and resources in villages have prevented communities from accessing opportunities presented by the digital economy.

Since 2014, the TCS' **BridgeIT** program has addressed social inequalities by empowering marginalized youth to become rural entrepreneurs and civic leaders in their villages. Partnering with local NGOs, TCS engages the cohort through a 5-year period, offering them skills, mentoring, technology, tools and resources. These digital entrepreneurs become serve as the last-mile-connect for people in the villages, delivering essential digital services in the areas of education, adult literacy, unemployment, social discrimination. This facilitates a 'bridging' of access and opportunities between youth in rural, underserved areas and those in urban towns. Through this strategic approach, the program has:

- Upskilled young men and women from marginalized communities to be successful digital entrepreneurs.

Twenty-seven-year-old entrepreneur Bapi Raita is a member of the Saura tribe which has some of the most severe problems with obtaining adequate nutrition in India. Starvation deaths are common among the Saura. Despite earning a diploma in Civil Engineering, Bapi was forced to do odd jobs to make ends meet for his family.

Bapi married, moving to Bangalore with his wife and working in a garment factory for nearly a year. When his wife fell ill, Bapi was had no choice but to return to his village to help manage her care. Still needing to earn money to support his family, Bapi learned about BridgeIT from a local NGO in Odisha and registered for the training. Over the course of the program, Bapi learned how to do business in the digital space with the training and mentoring provided by the BridgeIT facilitators, an opportunity which would have never been possible.

On completion of BridgeIT, and with equipment donated by TCS, Bapi was able to start his own online business. As his business began growing, so did his earnings. Bapi is now earning nearly ₹ 1.30 lakhs from just ₹ 4,000 before completing BridgeIT.

Bapi also wears BridgeIT Cluster Lead's hat for the area where he operates in. With this comes the responsibility to mentor seven other digital entrepreneurs from nearby villages. He gets a great sense of fulfilment when he carries out his role as a Leader.

Bapi proudly says, *"BridgeIT has changed my life and has brought hope of a good future for me and my family. It has brought brightness to our lives and our community."*

- Empowered them with digital technologies - facilitating a platform for essential online services within rural areas.
- Enabled them to educate students in Government schools and support literacy for adults through digital tools and resources.

Currently running in 30 districts across India, TCS' vision is to expand this program to all of India's aspirational districts. In FY 2022, BridgeIT has enabled **321** entrepreneurs across 20 districts in 9 States.

Program outcomes include:

- **1.5X** earnings compared to other self-employed individuals in rural areas.
- **95%** indicated increased income and improved standard of living.
- **92%** women indicated higher self-esteem at home.

Digital Impact Square (DISQ), a TCS Foundation Initiative, is an open social innovation platform designed to enhance the lives of citizens. The platform encourages innovation using digital technologies, to address the needs of citizens by inviting individuals or teams who want to bring in a change and create an impact in society through digital innovations.

DISQ has nurtured over **55** changemakers from around 590 innovators since 2016.

The program has received high appreciation from stakeholders in the government and social organization such as Social Alpha, Tata Trusts and Unltd India. There has been immense interest from various parts of the country in replicating the DISQ model. DISQ collaborated partners to identify potential opportunities for students.

Ekatvam Innovations Program outcomes the 'Most Promising Solution' globally by a panel of water experts from Ramboll, Grundfos and the International Water Association in a global competition. They were awarded scholarships to participate in the International Water Congress 2022 in Copenhagen.

Overall, the program has supported 12 solutions in reaching self-sufficiency.

Thought Leadership, Research and Insights

Digital Empowers

Digital Empowers, TCS' global thought leadership program in CSR, explores the intersection of technology and social impact, spotlighting the crucial role technology plays in finding solutions for intractable social issues. The purpose of the program is to raise awareness of digital technologies and social issues, explore the art of what's possible, and foster cross sector partnerships.

The program focuses on convening experts from technology, business, non-profit, public policy, and academia to ideate, collaborate, and create digitally driven solutions to social impact challenges. Since the inception of the program in 2018, Digital Empowers has engaged with over 6,000 experts across India, South Africa, the UK, and Mexico to expand collective knowledge and collaborate to come up with new solutions to the most pressing community issues, with the potential to scale and be applicable throughout the world.

TCS runs the Pitch for Purpose, a competition for start-up social entrepreneurs, to showcase mission-driven founders across the world whose fledging businesses are solving issues by deploying emerging technology and cutting-edge innovation. The competition grew in 2021, with over 200 entrepreneurs applying, and eight finalists pitching to a live panel of expert judges. Elliot Roth, Founder of Spira Inc., won the first-place prize with his innovative solution that creates carbon negative materials from genetically engineered algae.

In August 2021, Digital Empowers, in partnership with the U.S. Chamber of Commerce Foundation, published a culminating report, Technology as a Catalyst for Empowering Communities. With nine different topics examined, the report captured the unique insights, best practices, and key learnings from dozens of experts across sectors and industries that are actively driving social change using digital tools and technologies.

https://www.tcs.com/corporate-social-responsibility/digital-empowers/catalyst-report'

Health and Wellness

Healthy communities can drive better economic development and a feeling of wellbeing. TCS recognizes the importance of health and wellness, and promotes it among its employees as well as in local communities across the world. Its CSR initiatives seek to create new, systemic solutions that address society's biggest health challenges.

TCS has provided an integrated Hospital Management System and IT infrastructure, which includes a comprehensive and fully integrated, web-based solution, to **The Cancer Institute (CI), Chennai** and **Tata Medical Center (TMC), Kolkata**. As a result of laboratory equipment integration, a larger number of patients have benefited, with the solution providing 100% coverage of patients via virtual engagements, including those that did not show up or were not reachable. Patient care services implemented this year improved patient satisfaction and reduced anxiety.

A 15-bed COVID-19 care facility was setup and made operational at the Cancer Institute during the second COVID wave to facilitate care for COVID-affected patients. Patient Care Coordinators (PCCs) at TMC Kolkata continued to support patients by managing virtual-consultation processes, pediatric OPD appointments, patient crowd management and new patient management. Patients Investigation Reports were made available on the TMC website for online viewing directly by patients, without the need for physically visiting the hospital to collect reports.

Water Sanitation and Hygiene

Jal Jeevan Mission, a project by the Ministry of Jal Shakti, Government of India, has been supported by the Tata Group, with TCS providing key expertise in applying a 'Bridgital model' for monitoring rural water service delivery as well as enhanced stakeholder engagement via digitally enabled workflows.

To address several issues in rural water supply, TCS created an IoT-based smart water management solution for remote monitoring and control. This innovative solution is end-to-end, from source to tap, feature rich, uses advanced analytics and has high fidelity with over 99.9% uptime and accuracy. It can work in poor cellular network coverage areas (particularly in remote and rural villages) and is powered by solar power, best suited for off-grid environments.

This solution has so far helped provide regular, adequate, and clean drinking water to nearly **75,000** beneficiaries across 14 villages spread across 8 states and union territories in India.

It has helped identify distribution issues – such as outages, leakages or low pressure, and led to timely resolutions. It recently alerted both officials and the

local community of fast depleting groundwater levels, that led the villagers to build a source strengthening structure to recharge their borewell.

With TCS' IoT-based smart water management solutions, communities are able to:

- Ensure equitable and adequate water quantity, quality and periodicity.
- Reduce water borne diseases through water quality monitoring.
- Improve lives of rural households, especially women and girls.

Pro-Bono Technology Support to Social Organisations

As part of TCS' pro-bono technology support interventions or Tech4Good Programme, TCS continues to help community-based organizations and non-profits seeking to create social and environmental impact across the globe. TCS has been leveraging its abundant technology and Intellectual capital to create exponential impact across the globe by delivering pro-bono digital services to social organizations. The company's engagement strategy utilizes its contextual knowledge and the knowledge from a diverse network of experts to develop innovative solutions to unique problems within the community.

- The Resume Builder, an application created by TCS' Social Innovation Lab in close collaboration with TCS Research and Innovation group, helps participants of the Youth Employment Program generate standardized resumes, setting them up for success in the job market. The application has been piloted with over 3,000 YEP participants and slated to be expand further in the future.
- In Australia, TCS provided pro bono technology empowerment to Meals on Wheels NSW, Food Ladder, Charitable Recycling Australia, The Indigenous Marathon Foundation and Briometrix so they could continue to support people who depended on their services even during in the pandemic.

  "Since TCS helped us develop the calculator, we have been able to reach greater audiences both through our website and networks and also through our members," said Omer Soker, CEO, Charitable Recycling Australia.
- In Italy during the peak of the pandemic, TCS supported San Martino, a social enterprise focused in helping non-nationals living in Italy start their careers to create a fair ground for employment. TCS designed, developed and implemented a digital solution so they can continue to help people from all backgroundsacross Italy kickstart their careers.

  "Thanks to the great support of TCS experts, San Martino was able to design and implement a Career Guidance section on their website specifically designed for international students," explained Mario Porcelli, Managing Director for San Martino Servizi.
- In North America, TCS continues to build pro-bono digital solutions for organizations like The Council for Responsible Sport, International Medical Corps and so on. The Council for Responsible Sport helps sporting organizers assess the Environmental, Social, and Governance impact of events and has been helping organizers of i.e., the Bank of America Chicago Marathon to track their resource usage and impact for years.
- TCS' 2,000-hour pro bono commitment to the 'Re-Score project' helped envision the Council's drive to create a digital solution, leveraging cloud-based technology that would serve as a first-of-its-kind in the field. Re-Score makes credible guidance and performance tracking accessible to all organizations that host sporting events.
- For International Medical Corps, a global, non-profit, humanitarian aid organization spread across 30 countries in Africa, Asia and

Middle East with a focus on providing health services support, clean water and hygiene education, women's and children's health and emergency response and preparedness, TCS helped reimagine their vendor prequalification system and digitized the processes for improved efficiency and operational resilience.

Employee Engagement

TCS' skill-based CSR initiatives offer volunteering opportunities to employees, helping them give back to the communities, imbuing them with a higher sense of purpose. Our people-centric investments go beyond the boundaries of our organization, into communities across the world, where we support initiatives to bridge the digital divide, and address some of the most pressing issues in countries where we live and work.

TCS' Employee Volunteer Program (EVP) offers opportunities to employees for contributing their time and effort towards societal well-being, while sensitizing them to the issues that are plaguing the world. Volunteering fosters a sense of fraternity, bringing employees together and engaging them in ways beyond work.

During the devastating second wave of COVID-19 in India, EVP team has worked with various internal TCS teams such as Safety First, Cares to create the content for several community support initiatives. The content was then used to create awareness

Praveen Kumar a TD faculty from MBU, started volunteering for goIT program with training workshops for around 400 students from a nearby school in Kanchipuram. During sessions on problem-solving and design thinking, he interacted with students and was amused by how they related to the concepts in their own unique ways. He says seeing students view the process of learning as a game transported him back to his school days. He also believes that being around students can help one forget about their sorrows, anxieties, and stresses, hence boosting one's energy and spreading positivity. His journey continues to shape many more subsequent generation's students, preparing them for 21st-century skills. He has also been an active faculty member for weekly YEP workshops, conducted several business communication sessions for YEP colleges in Tamil Nadu. He urges other volunteers to deliver the courses with enthusiasm, provide examples and share real-world references to enable students to relate to concepts and apply their learnings in everyday activities.

Chai Eng Law an HR Specialist has been an active YEP volunteer for over six years. Once her session was scheduled over a weekend, yet the students seemed incredibly happy to be at the college. As she watched their faces filled with enthusiasm, she knew volunteering for this program would be worth her time and effort, which later turned out to be 100% true. She says, *"I strongly believe that in learning, you will teach, and in teaching, you will learn. YEP, gives me the opportunity to practice this belief of mine."* Her weekends would pass by in a blink of an eye, and the benefits from this program far outweighed the inconveniences she faced. She felt overwhelmed when she saw her students gradually overcome their hesitation to converse in English and eventually became more confident in spoken English. She recalls, one day as she was about to enter the lift in her office building, she spotted a young associate stepping out of the lift. Her joy knew no bounds when she recognized this person as a YEP trainee who had appeared at a mock interview conducted by her.

on the importance of vaccination to curb vaccine hesitancy, facilitating mental health awareness sessions for beneficiaries of the CSR initiatives and the community at large. EVP team has owned and managed this entire process by liaising with internal CSR teams and external TCS functions.

More than **58,900** TCS associates volunteered nearly **700,000** hours towards various programs in FY 2022 aligned to Sustainable Development Goals 3, 4, 5, 8, 10, and 13.

Program outcomes include:

- Through Pro Engage, TCSers from 13 countries and 8 regions supported 204 pro bono projects, contributing 14,000+ hours to NGOs in India, NA, and LATAM.
- IMF kicked off a Global Teacher Collaboration with 29 teachers from 5 countries, engaging 100+ volunteers from NA and LATAM over 6 weeks.
- Celebrated the 7th annual Sadhana Month, through which over 16,000+ volunteers from India, NA, and LATAM donated 215,000 hours of service in their local communities.
- Leaders with Purpose, a civic leadership program designed to nurture and prepare TCS leaders with the skill to lead societal change, which was successfully running in North America for the last 3 years, was launched in India, UK&I and LATAM. The program harnesses the leadership, communication, and project management skills needed to create a sustained commitment to social impact within our industry and communities.

Empowering Communities in the Fight Against COVID 19

Initiatives to help communities deal with the pandemic, launched in the prior year along with TATA Group companies continued in FY 2022. With the support of TCSers across the globe, the company continued to help those that needed it the most. Key highlights:

- TCS donated 1,170 oxygen concentrators and 252 ventilators across 15 states in India and mobilized thousands of employees, customers and partners to support our COVID response
- Dependents of those who lost their lives to the pandemic were enrolled in TCS' Youth Employment Program, where they were trained and groomed to improve their employability. New livelihood avenues were made available for 1,600 COVID-affected families.
- TCS' BridgeIT entrepreneurs supported their local communities, helping out with vaccine registration, accessing online COVID reports and online government initiatives.
- TCS volunteers helped cascade awareness materials around infection prevention and vaccination in remote communities, sourced from authentic sources such as the Government of India, MoHFW and WHO.
- The TCS Cares program organized sessions to provide mental health support.
- Basic provisions such as rice, cooking oil, sugar, canned food were provided to underprivileged, poor and disabled families.
- With all schooling going virtual, TCS donated laptops and mobile broadband connections to students from low-income families, and volunteers held conducted sessions on internet literacy.

Consolidated Financial Statements

Independent Auditors' Report

The Board of Directors
Tata Consultancy Services Limited

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the Consolidated financial statements of Tata Consultancy Services Limited and its subsidiaries, which comprise the Consolidated statements of financial position as of March 31, 2022 and 2021, and the related Consolidated statements of profit or loss and other comprehensive income, changes in equity, and cash flows for the years then ended, and the related notes to the Consolidated financial statements.

In our opinion, the accompanying Consolidated financial statements present fairly, in all material respects, the financial position of the Tata Consultancy Services Limited as of March 31, 2022 and 2021 and its financial performance and its cash flows for the years then ended in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the Company and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the Consolidated financial statements in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of Consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the Consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for one year after the date that the Consolidated financial statements are available to be issued.

Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the Consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the Consolidated financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the Consolidated financial stalements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the Consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the Consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

KPMG Assurance and Consulting Services LLP

Gurugram, India

11 April 2022

Consolidated Statement of Financial Position

	Note	As at March 31, 2022	As at March 31, 2021
		(In million of USD)	
ASSETS			
Current assets			
Cash and cash equivalents	9(a)	1,650	934
Bank deposits		728	308
Investments	9(b)	3,998	3,973
Trade receivables			
Billed	9(c)	4,501	4,098
Unbilled		1,022	897
Other financial assets	9(d)	1,065	1,781
Income tax assets (net)		1	3
Other assets	11(d)	1,344	1,532
Total current assets		**14,309**	**13,526**
Non-current assets			
Bank deposits		163	98
Investments	9(b)	29	29
Trade receivables			
Billed	9(c)	19	8
Unbilled		7	37
Other financial assets	9(d)	176	120
Income tax assets (net)		262	251
Deferred tax assets (net)	15	486	532
Property, plant and equipment	11(a)	1,596	1,653
Right-of-use assets	10	1,009	1,040
Goodwill	11(b)	520	538
Other intangible assets	11(c)	145	65
Other assets	11(d)	251	206
Total non-current assets		**4,663**	**4,577**
TOTAL ASSETS		**18,972**	**18,103**
LIABILITIES AND EQUITY			
Liabilities			
Current liabilities			
Lease liabilities		192	176
Trade payables		1,063	1,071
Other financial liabilities	9(e)	1,015	838
Unearned and deferred revenue		480	497
Other liabilities	11(e)	1,108	554
Provisions	11(f)	186	189
Employee benefit obligations	16	503	476
Income tax liabilities (net)		1,046	850
Total current liabilities		**5,593**	**4,651**

	Note	As at March 31, 2022	As at March 31, 2021
		(In million of USD)	
Non-current liabilities			
Lease liabilities		841	886
Other financial liabilities	9(e)	76	38
Employee benefit obligations	16	89	102
Deferred tax liabilities (net)	15	78	104
Unearned and deferred revenue		147	163
Total non-current liabilities		**1,231**	**1,293**
TOTAL LIABILITIES		**6,824**	**5,944**
Equity			
Share capital	9(j)	68	69
Retained earnings		14,943	15,144
Other equity		(2,958)	(3,148)
Equity attributable to shareholders of the Company		**12,053**	**12,065**
Non-controlling interests		95	94
TOTAL EQUITY		**12,148**	**12,159**
TOTAL LIABILITIES AND EQUITY		**18,972**	**18,103**

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statement of Profit or Loss and Other Comprehensive Income

	Note	Year ended March 31, 2022	Year ended March 31, 2021
		(In million of USD, except shares and per share data)	
Revenue	12	25,707	22,174
Cost of revenue		15,366	13,118
GROSS PROFIT		**10,341**	**9,056**
Operating expenses			
Selling, general and administrative expenses			
Provision towards legal claim	19	-	165
Others		3,845	3,315
Total selling, general and administrative expenses		**3,845**	**3,480**
Operating profit		**6,496**	**5,576**
Other income			
Finance and other income	14(a)	358	339
Finance costs	14(b)	(105)	(86)
Other gains (net)	14(c)	181	85
Other income (net)		**434**	**338**
PROFIT BEFORE TAXES		**6,930**	**5,914**
Income tax expense	15	1,775	1,513
PROFIT FOR THE YEAR		**5,155**	**4,401**
OTHER COMPREHENSIVE INCOME (OCI)			
Items that will not be reclassified subsequently to profit or loss			
Remeasurement of defined employee benefit plans		37	(10)
Net change in fair value of investments in equity shares carried at fair value through OCI		(1)	-
Items that will be reclassified subsequently to profit or loss			
Net change in fair value of investments other than equity shares carried at fair value through OCI		(45)	3
Net change in intrinsic value of derivatives designated as cash flow hedges		(4)	2
Net change in time value of derivatives designated as cash flow hedges		(5)	6
Exchange differences on translation of foreign operations and translation to presentation currency		(398)	387
TOTAL OTHER COMPREHENSIVE INCOME / (LOSSES), NET OF TAX		**(416)**	**388**
TOTAL COMPREHENSIVE INCOME FOR THE YEAR		**4,739**	**4,789**
Profit for the year attributable to:			
Shareholders of the Company		5,139	4,384
Non-controlling interests		16	17
		5,155	**4,401**

	Note	Year ended March 31, 2022	Year ended March 31, 2021
		(In million of USD, except shares and per share data)	
Other comprehensive income for the year attributable to:			
Shareholders of the Company		(409)	388
Non-controlling interests		(7)	-
		(416)	**388**
Total comprehensive income for the year attributable to:			
Shareholders of the Company		4,730	4,772
Non-controlling interests		9	17
		4,739	**4,789**
Earnings per share			
Weighted average number of equity shares		3,698,832,195	3,740,110,733
Basic and diluted earnings per share in USD	17	1.39	1.17

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statement of Changes in Equity

	Number of shares	Share capital	Retained earnings	Special Economic Zone re-investment reserve	Foreign currency translation reserve	Cash flow hedging reserve		Investment revaluation reserve	Equity attributable to shareholders of the Company	Non-controlling interests	Total equity
						Intrinsic value	Time value				
	(In million of USD, except share data)										
Balance as at April 1, 2021	**3,699,051,373**	**69**	**15,144**	**372**	**(3,613)**	**(3)**	**(10)**	**106**	**12,065**	**94**	**12,159**
Profit for the year		-	5,139	-	-	-	-	-	5,139	16	5,155
Other comprehensive income / (losses)		-	37	-	(391)	(4)	(5)	(46)	(409)	(7)	(416)
Total comprehensive income / (losses)	**-**	**-**	**5,176**	**-**	**(391)**	**(4)**	**(5)**	**(46)**	**4,730**	**9**	**4,739**
Dividend		-	(1,803)	-	-	-	-	-	(1,803)	(8)	(1,811)
Expenses for buy-back of equity shares[1]		-	(6)	-	-	-	-	-	(6)	-	(6)
Tax on buy-back of equity shares[1]		-	(550)	-	-	-	-	-	(550)	-	(550)
Buy-back of equity shares[1]	(40,000,000)	(1)	(2,382)	-	-	-	-	-	(2,383)	-	(2,383)
Transfer to Special Economic Zone re-investment reserve		-	(1,262)	1,262	-	-	-	-	-	-	-
Transfer from Special Economic Zone re-investment reserve		-	626	(626)	-	-	-	-	-	-	-
Balance as at March 31, 2022	**3,659,051,373**	**68**	**14,943**	**1,008**	**(4,004)**	**(7)**	**(15)**	**60**	**12,053**	**95**	**12,148**

Consolidated Statement of Changes in Equity

	Number of shares	Share capital	Retained earnings	Special Economic Zone re-investment reserve	Foreign currency translation reserve	Cash flow hedging reserve		Investment revaluation reserve	Equity attributable to shareholders of the Company	Non-controlling interests	Total equity
						Intrinsic value	Time value				
	(In million of USD, except share data)										
Balance as at April 1, 2020	**3,752,384,706**	**70**	**15,034**	**247**	**(4,000)**	**(5)**	**(16)**	**103**	**11,433**	**85**	**11,518**
Profit for the year		-	4,384	-	-	-	-	-	4,384	17	4,401
Other comprehensive income / (losses)		-	(10)	-	387	2	6	3	388	-	388
Total comprehensive income / (losses)	**-**	**-**	**4,374**	**-**	**387**	**2**	**6**	**3**	**4,772**	**17**	**4,789**
Dividend		-	(1,457)	-	-	-	-	-	(1,457)	(8)	(1,465)
Expenses for buy-back of equity shares[1]		-	(4)	-	-	-	-	-	(4)	-	(4)
Tax on buy-back of equity shares[1]		-	(506)	-	-	-	-	-	(506)	-	(506)
Buy-back of equity shares[1]	(53,333,333)	(1)	(2,172)	-	-	-	-	-	(2,173)	-	(2,173)
Transfer to Special Economic Zone re-investment reserve		-	(683)	683	-	-	-	-	-	-	-
Transfer from Special Economic Zone re-investment reserve		-	558	(558)	-	-	-	-	-	-	-
Balance as at March 31, 2021	**3,699,051,373**	**69**	**15,144**	**372**	**(3,613)**	**(3)**	**(10)**	**106**	**12,065**	**94**	**12,159**

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

[1]Refer note 9(j).

Gain of $37 million and loss of $10 million on remeasurement of defined employee benefit plans (net of tax) is recognised as a part of retained earnings for the years ended March 31, 2022 and 2021, respectively.

Retained earnings include statutory reserve of $29 million and $61 million as at March 31, 2022 and 2021, respectively.

Total equity (primarily retained earnings) includes $232 million and $186 million as at March 31, 2022 and 2021, respectively, pertaining to trusts and TCS Foundation held for specified purposes.

Consolidated Statements of Cash Flows

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Profit for the year	5,155	4,401
Adjustments for:		
Depreciation and amortisation expense	617	549
Bad debts and advances written off, allowance for doubtful trade receivables and advances (net)	18	27
Provision towards legal claim (Refer note 19)	-	165
Income tax expense	1,775	1,513
Net gain on lease modification	(1)	(14)
Net loss on sub-lease	1	-
Unrealised foreign exchange gain	(16)	(3)
Net gain on disposal of property, plant and equipment	(3)	(2)
Net gain on disposal / fair valuation of investments	(1)	-
Operating profit before working capital changes	**7,545**	**6,636**
Net change in		
Trade receivables		
Billed	(564)	170
Unbilled	(125)	(27)
Other financial assets	(11)	28
Other assets	108	(378)
Trade payables	25	(13)
Unearned and deferred revenue	(14)	147
Other financial liabilities	166	17
Other liabilities and provisions	62	204
Cash generated from operations	**7,192**	**6,784**
Taxes paid (net of refunds)	(1,539)	(1,228)
Net cash generated from operating activities	**5,653**	**5,556**
CASH FLOWS FROM INVESTING ACTIVITIES		
Bank deposits placed	(2,130)	(890)
Inter-corporate deposits placed	(1,966)	(2,841)
Purchase of investments*	(10,062)	(7,342)
Payment for purchase of property, plant and equipment	(332)	(368)
Payment including advances for acquiring right-of-use assets	(1)	(14)
Payment for purchase of intangible assets	(67)	(48)
Proceeds from bank deposits	1,591	648
Proceeds from inter-corporate deposits	2,619	2,427
Proceeds from disposal / redemption of investments*	9,812	6,968

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Proceeds from disposal of property, plant and equipment	4	5
Net cash used in investing activities	**(532)**	**(1,455)**
CASH FLOWS FROM FINANCING ACTIVITIES		
Repayment of lease liabilities	(190)	(180)
Dividend paid	(1,803)	(1,457)
Dividend paid to non-controlling interests	(8)	(8)
Transfer of funds to buy-back escrow account	(24)	(21)
Transfer of funds from buy-back escrow account	21	22
Expenses for buy-back of equity shares (Refer note 9(j))	(6)	(4)
Tax on buy-back of equity shares (Refer note 9(j))	-	(510)
Buy-back of equity shares (Refer note 9(j))	(2,362)	(2,192)
Advance towards purchase of non-controlling interests	(3)	-
Net cash used in financing activities	**(4,375)**	**(4,350)**
Net change in cash and cash equivalents	**746**	**(249)**

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Cash and cash equivalents at the beginning of the year	934	1,146
Exchange difference on translation of foreign currency cash and cash equivalents	(30)	37
Cash and cash equivalents at the end of the year	**1,650**	**934**
Components of cash and cash equivalents		
Cash at banks and in hand	292	718
Bank deposits (original maturity less than three months)	1,358	216
	1,650	**934**
Supplementary cash flow information		
Interest paid	93	86
Interest received	362	368
Dividend received	1	1

SEE ACCOMPANYING NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

*Purchase of investments include $2 million and $24 million for the years ended March 31, 2022 and 2021, respectively, and proceeds from disposal / redemption of investments include $12 million and $14 million for the years ended March 31, 2022 and 2021, respectively, held by trusts and TCS Foundation held for specified purposes.

1) Corporate information

Tata Consultancy Services Limited ("the Company") and its subsidiaries (collectively together with employee welfare trusts referred to as "the Group") provide IT services, consulting and business solutions and have been partnering with many of the world's largest businesses in their transformation journeys. The Group offers a consulting-led, cognitive powered, integrated portfolio of IT, business and engineering services and solutions. This is delivered through its unique Location-Independent Agile delivery model recognised as a benchmark of excellence in software development.

The Company is a public limited company incorporated and domiciled in India. The address of its corporate office is TCS House, Raveline Street, Fort, Mumbai - 400001. As at March 31, 2022, Tata Sons Private Limited, the holding company owned 72.27% of the Company's equity share capital.

The Board of Directors approved the consolidated financial statements for the year ended March 31, 2022 and authorised for issue on April 11, 2022.

2) Statement of compliance

These consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB).

3) Basis of preparation

These consolidated financial statements have been prepared on historical cost basis except for certain financial instruments and defined benefit plans which are measured at fair value or amortised cost at the end of each reporting period. Historical cost is generally based on the fair value of the consideration given in exchange for goods and services. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. All assets and liabilities have been classified as current and non-current as per the Group's normal operating cycle. Based on the nature of services rendered to customers and time elapsed between deployment of resources and the realisation in cash and cash equivalents of the consideration for such services rendered, the Group has considered an operating cycle of 12 months.

Cash flows have been prepared using indirect method, whereby profit or loss is adjusted for the effects of transactions of a non-cash nature, any deferrals or accruals of past or future operating cash receipts or payments and items of income or expense associated with investing or financing cash flows. The Group classifies interest paid and interest and dividend received as cash flow from operating activities. The cash flows from operating, investing and financing activities of the Group are segregated. The Group considers all highly liquid investments that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value to be cash equivalents.

The functional currency of the Company and its Indian subsidiaries is the Indian Rupee (₹). The functional currency of foreign subsidiaries is the currency of the primary economic environment in which the entity operates. Foreign currency transactions are recorded at exchange rates prevailing on the date of the transaction. Foreign currency denominated monetary assets and liabilities are retranslated at the exchange rate prevailing on the dates of statement of financial position and exchange gains and losses arising on settlement and restatement are recognised in profit or loss. Non-monetary assets and liabilities that are measured in terms of historical cost in foreign currencies are not retranslated.

The significant accounting policies used in preparation of the consolidated financial statements have been discussed in the respective notes.

4) Basis of consolidation

The Company consolidates all entities which are controlled by it.

The Company establishes control when; it has power over the entity, is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect the entity's returns by using its power over relevant activities of the entity.

Entities controlled by the Company are consolidated from the date control commences until the date control ceases.

The results of subsidiaries acquired, or sold, during the year are consolidated from the effective date of acquisition and up to the effective date of disposal, as appropriate.

The financial statements of the Group companies are consolidated on a line-by-line basis and all inter-company transactions, balances, income and expenses are eliminated in full on consolidation.

Changes in the Company's interests in subsidiaries that do not result in a loss of control are accounted for as equity transactions. The carrying amount of the Company's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to shareholders of the Company.

Assets and liabilities of entities with functional currency other than presentation currency have been translated to the presentation currency using exchange rates prevailing on the dates of statement of financial position. Statement of profit or loss and other comprehensive income of such entities has been translated using weighted average exchange rates. Translation adjustments have been reported as foreign currency translation reserve in the statement of changes in equity. When a foreign operation is disposed off in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount of exchange differences related to that foreign operation recognised in OCI is reclassified to profit or loss as part of the gain or loss on disposal.

These consolidated financial statements are presented in US Dollars ($) to facilitate the investors' ability to evaluate the Group's performance and financial position in comparison to similar companies domiciled in different foreign jurisdictions.

5) Use of estimates and judgements

The preparation of consolidated financial statements in conformity with the recognition and measurement principles of International Financial Reporting Standards (IFRS) requires management to make estimates and judgements that affect the reported balances of assets and liabilities, disclosures of contingent liabilities as at the date of consolidated financial statements and the reported amounts of income and expenses for the periods presented.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and future periods are affected.

The Group uses the following critical accounting estimates in preparation of its consolidated financial statements:

(a) Revenue recognition

Revenue for fixed-price contracts is recognised using percentage-of-completion method. The Group uses judgement to estimate the future cost-to-completion of the contracts which is used to determine degree of completion of the performance obligation.

(b) Useful lives of property, plant and equipment

The Group reviews the useful life of property, plant and equipment at the end of each reporting period. This reassessment may result in change in depreciation expense in future periods.

(c) Impairment of goodwill

The Group estimates the value-in-use of the cash generating units (CGUs) based on the future cash flows after considering current economic conditions and trends, estimated future operating results and growth rate and anticipated future economic and regulatory conditions. The estimated cash flows are developed using internal forecasts. The discount rates used for the CGUs represent the weighted average cost of capital based on the historical market returns of comparable companies.

(d) Fair value measurement of financial instruments

When the fair value of financial assets and financial liabilities recorded in the statement of financial position cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the Discounted Cash Flow model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of judgement is required in establishing fair values. Judgements include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

(e) Provision for income tax and deferred tax assets

The Group uses estimates and judgements based on the relevant rulings in the areas of allocation of revenue, costs, allowances and disallowances which is exercised while determining the provision for income tax. A deferred tax asset is recognised to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences and tax losses can be utilised. Accordingly, the Group exercises its judgement to reassess the carrying amount of deferred tax assets at the end of each reporting period.

(f) Provisions and contingent liabilities

The Group estimates the provisions that have present obligations as a result of past events and it is probable that outflow of resources will be required to settle the obligations. These provisions are reviewed at the end of each reporting period and are adjusted to reflect the current best estimates.

The Group uses significant judgements to assess contingent liabilities. Contingent liabilities are recognised when there is a possible obligation arising from past events, the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group or a present obligation that arises from past events where it is either not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount cannot be made. Contingent assets are neither recognised nor disclosed in the consolidated financial statements.

(g) Employee benefits

The accounting of employee benefit plans in the nature of defined benefit requires the Group to use assumptions. These assumptions have been explained under employee benefits note.

(h) Leases

The Group evaluates if an arrangement qualifies to be a lease as per the requirements of IFRS 16. Identification of a lease requires significant judgement. The Group uses significant judgement in assessing the lease term (including anticipated renewals) and the applicable discount rate.

The Group determines the lease term as the non-cancellable period of a lease, together with both periods covered by an option to extend the lease if the Group is reasonably certain to exercise that option; and periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option. In assessing whether the Group is reasonably certain to exercise an option to extend a lease, or not to exercise an option to terminate a lease, it considers all relevant facts and circumstances that create an economic incentive for the Group to exercise the option to extend the lease, or not to exercise the option to terminate the lease. The Group revises the lease term if there is a change in the non-cancellable period of a lease.

The discount rate is generally based on the incremental borrowing rate specific to the lease being evaluated or for a portfolio of leases with similar characteristics.

(i) Impact of COVID-19 (pandemic)

The Group has taken into account all the possible impacts of COVID-19 in preparation of these consolidated financial statements, including but not limited to its assessment of, liquidity and going concern assumption, recoverable values of its financial and non-financial assets, impact on revenue recognition owing to changes in cost budgets of fixed price contracts, impact on leases and impact on effectiveness of its hedges. The Group has carried out this assessment based on available internal and external sources of information upto the date of approval of these consolidated financial statements and believes that the impact of COVID-19 is not material to these consolidated financial statements and expects to recover the carrying amount of its assets. The impact of COVID-19 on the consolidated financial statements may differ from that estimated as at the date of approval of these consolidated financial statements owing to the nature and duration of COVID-19.

6) Nature and purpose of reserves

(a) Retained earnings

This reserve represents undistributed accumulated earnings of the Group as on the date of statement of financial position.

(b) Special Economic Zone re-investment reserve

The Special Economic Zone (SEZ) re-investment reserve is created out of the profit of eligible SEZ units in terms of the provisions of section 10AA(1)(ii) of the Income-tax Act, 1961 of India. The reserve will be utilised by the Group for acquiring new assets for the purpose of its business as per the terms of section 10AA(2) of Income-tax Act, 1961 of India.

(c) Foreign currency translation reserve

The exchange differences arising from the translation of financial statements of foreign operations with functional currency other than

presentation currency is recognised in other comprehensive income, net of taxes and is presented within equity in the foreign currency translation reserve.

(d) Cash flow hedging reserve

The cash flow hedging reserve represents the cumulative effective portion of gains or losses arising on changes in fair value of designated portion of hedging instruments entered into for cash flow hedges. Such gains or losses will be reclassified to profit or loss in the period in which the underlying hedged transaction occurs.

(e) Investment revaluation reserve

This reserve represents the cumulative gains and losses arising on the revaluation of equity and debt instruments on the date of statement of financial position measured at fair value through other comprehensive income. The reserves accumulated will be reclassified to retained earnings and profit or loss respectively, when such instruments are disposed.

7) Recent accounting standards

The Group has not applied the following new and revised IFRSs that have been issued but are not yet effective.

Amendments to IAS 1 Classification of Liabilities[1]

Amendments to IAS 1 and IFRS Practice Statement 2 Disclosure of Accounting Policies[1]

Amendments to IAS 8 Definition of Accounting Estimates[1]

Amendments to IAS 12 Deferred Tax related to Assets and Liabilities arising from a Single Transaction[1]

[1]Effective for annual periods beginning on or after January 1, 2023.

IAS 1 – Classification of Liabilities

In January 2020, IASB issued the final amendments in Classification of Liabilities as Current or Non-Current, which affect only the presentation of liabilities in the statement of financial position. They clarify that classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period and align the wording in all affected paragraphs to refer to the "right" to defer settlement by at least twelve months. The classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability. They make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services. The Group does not expect the amendments to have any significant impact on its presentation of liabilities in its statement of financial position.

IAS 1 – Disclosure of Accounting Policies

In February 2021, IASB issued 'Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2)' which is intended to help entities in deciding which accounting policies to disclose in their financial statements. The amendments to IAS 1 require entities to disclose their material accounting policies rather than their significant accounting policies. The amendments to IFRS Practice Statement 2 provide guidance on how to apply the concept of materiality to accounting policy disclosures. The Group does not expect this amendment to have any significant impact in its financial statements.

IAS 8 – Definition of Accounting Estimates

In February 2021, IASB issued 'Definition of Accounting Estimates (Amendments to IAS 8)' to help entities to distinguish between accounting policies and accounting estimates. The definition of a change in accounting

estimates has been replaced with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty". Entities develop accounting estimates if accounting policies require items in financial statements to be measured in a way that involves measurement uncertainty. The Group does not expect this amendment to have any significant impact in its financial statements.

IAS 12 – Income Taxes

In May 2021, IASB issued Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12), which clarify how companies account for deferred tax on transactions such as leases and decommissioning obligations. The amendments narrowed the scope of the recognition exemption in paragraphs 15 and 24 of IAS 12 (recognition exemption) so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences. The Group will evaluate the impact, if any, in its financial statements.

8) Business combinations

The Group accounts for its business combinations under acquisition method of accounting. Acquisition related costs are recognised in profit or loss as incurred. The acquiree's identifiable assets, liabilities and contingent liabilities that meet the condition for recognition are recognised at their fair values at the acquisition date.

Purchase consideration paid in excess of the fair value of net assets acquired is recognised as goodwill. Where the fair value of identifiable assets and liabilities exceed the cost of acquisition, the excess is recognised in determination of profit or loss after reassessing the fair values of the net assets and contingent liabilities.

The interest of non-controlling shareholders is initially measured either at fair value or at the non-controlling interests' proportionate share of the acquiree's identifiable net assets. The choice of measurement basis is made on an acquisition-by-acquisition basis. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity of subsidiaries.

Business combinations arising from transfers of interests in entities that are under common control are accounted at historical cost. The difference between any consideration given and the aggregate historical carrying amounts of assets and liabilities of the acquired entity is recorded in shareholders' equity.

9) Financial assets, financial liabilities and equity instruments

Financial assets and liabilities are recognised when the Group becomes a party to the contractual provisions of the instrument. Financial assets and liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value measured on initial recognition of financial asset or financial liability.

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired.

Cash and cash equivalents

The Group considers all highly liquid financial instruments, which are readily convertible into known amounts of cash that are subject to an insignificant risk of change in value and having original maturities of three months or less from the date of purchase, to be cash equivalents. Cash and cash equivalents consist of balances with banks which are unrestricted for withdrawal and usage.

Financial assets at amortised cost

Financial assets are subsequently measured at amortised cost if these financial assets are held within a business whose objective is to hold these assets in order to collect contractual cash flows and the contractual terms of the financial assets give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at fair value through other comprehensive income

Financial assets are measured at fair value through other comprehensive income if these financial assets are held within a business whose objective is achieved by both collecting contractual cash flows on specified dates that are solely payments of principal and interest on the principal amount outstanding and selling financial assets.

The Group has made an irrevocable election to present subsequent changes in the fair value of equity investments not held for trading in other comprehensive income.

Financial assets at fair value through profit or loss

Financial assets are measured at fair value through profit or loss unless they are measured at amortised cost or at fair value through other comprehensive income on initial recognition. The transaction costs directly attributable to the acquisition of financial assets and liabilities at fair value through profit or loss are immediately recognised in profit or loss.

Financial liabilities

Financial liabilities are measured at amortised cost using the effective interest method.

Equity instruments

An equity instrument is a contract that evidences residual interest in the assets of the company after deducting all of its liabilities. Equity instruments issued by the Group are recognised at the proceeds received net of direct issue cost.

Derivative accounting

- **Instruments in hedging relationship**

  The Group designates certain foreign exchange forward, currency options and futures contracts as hedge instruments in respect of foreign exchange risks. These hedges are accounted for as cash flow hedges.

  The Group uses hedging instruments that are governed by the policies of the Company and its subsidiaries which are approved by their respective Board of Directors. The policies provide written principles on the use of such financial derivatives consistent with the risk management strategy of the Company and its subsidiaries.

  The hedge instruments are designated and documented as hedges at the inception of the contract. The Group determines the existence of an economic relationship between the hedging instrument and hedged item based on the currency, amount and timing of their respective cash flows. The effectiveness of hedge instruments to reduce the risk associated with the exposure being hedged is assessed and measured at inception and on

an ongoing basis. If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in other equity are immediately reclassified in net foreign exchange gains in profit or loss.

The effective portion of change in the fair value of the designated hedging instrument is recognised in the other comprehensive income and accumulated under the heading cash flow hedging reserve.

The Group separates the intrinsic value and time value of an option and designates as hedging instruments only the change in intrinsic value of the option. The change in fair value of the intrinsic value and time value of an option is recognised in the other comprehensive income and accounted as a separate component of equity. Such amounts are reclassified in profit or loss when the related hedged items affect profit or loss.

Hedge accounting is discontinued when the hedging instrument expires or is sold, terminated or no longer qualifies for hedge accounting. Any gain or loss recognised in other comprehensive income and accumulated in equity till that time remains and is recognised in profit or loss when the forecasted transaction ultimately affects profit or loss. Any gain or loss is recognised immediately in profit or loss when the hedge becomes ineffective.

- **Instruments not in hedging relationship**

The Group enters into contracts that are effective as hedges from an economic perspective, but they do not qualify for hedge accounting. The change in the fair value of such instrument is recognised in profit or loss.

Impairment of financial assets (other than at fair value)

The Group assesses at each date of statement of financial position whether a financial asset or a group of financial assets is impaired.

IFRS 9 requires expected credit losses to be measured through a loss allowance. The Group recognises lifetime expected losses for all contract assets and / or all trade receivables that do not constitute a financing transaction. In determining the allowances for doubtful trade receivables the Group has used a practical expedient by computing the expected credit loss allowance for trade receivables based on a provision matrix. The provision matrix takes into account historical credit loss experience and is adjusted for forward looking information. The expected credit loss allowance is based on the ageing of the receivables that are due and allowance rates used in the provision matrix. For all other financial assets, expected credit losses are measured at an amount equal to the 12-months expected credit losses or at an amount equal to the life time expected credit losses if the credit risk on the financial asset has increased significantly since initial recognition.

(a) Cash and cash equivalents

Cash and cash equivalents consist of the following:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Cash at banks and in hand	292	718
Bank deposits (original maturity less than three months)	1,358	216
Total	**1,650**	**934**
Held within India	1,012	58
Held outside India	638	876
Total	**1,650**	**934**

(b) Investments

Investments consist of the following:

Investments – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Investments carried at fair value through profit or loss		
Mutual fund units	248	668
	248	**668**
Investments carried at fair value through OCI		
Government bonds and securities	3,391	3,226
Corporate bonds	164	61
	3,555	**3,287**
Investments carried at amortised cost		
Certificate of deposits	13	-
Corporate bonds	1	-
Commercial papers	50	18
Treasury bills	131	-
	195	**18**
Total	**3,998**	**3,973**

Investments – Current includes $13 million and $23 million as at March 31, 2022 and 2021, respectively, pertaining to trusts and TCS Foundation held for specified purposes.

Government bonds and securities includes bonds pledged with bank for credit facility and with manager to the buy-back amounting to $470 million and $225 million as at March 31, 2022 and 2021, respectively.

Investments – Non-current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Investments designated at fair value through OCI		
Equity shares	5	5
	5	**5**
Investments carried at amortised cost		
Government bonds and securities	24	23
Corporate bonds	-	1
	24	**24**
Total	**29**	**29**

Investments – Non-current includes $24 million and $23 million as at March 31, 2022 and 2021, respectively, pertaining to trusts held for specified purposes.

The movement in fair value of investments carried / designated at fair value through OCI is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**106**	**103**
Net loss arising on revaluation of investments in equities carried at fair value through other comprehensive income	(1)	-
Net gain / (loss) arising on revaluation of investments other than equities carried at fair value through other comprehensive income	(69)	4
Deferred tax relating to net gain / (loss) arising on revaluation of investments other than equities carried at fair value through other comprehensive income	24	(1)
Balance at the end of the year	**60**	**106**

(c) Trade receivables - Billed

Trade receivables - Billed consist of the following:

Trade receivables - Billed – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Trade receivables - Billed	4,562	4,174
Less: Allowance for doubtful trade receivables - Billed	(61)	(76)
Total	**4,501**	**4,098**

Trade receivables - Billed – Non-current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Trade receivables - Billed	134	107
Less: Allowance for doubtful trade receivables - Billed	(115)	(99)
Total	**19**	**8**

(d) Other financial assets

Other financial assets consist of the following:

Other financial assets – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Security deposits	23	23
Fair value of foreign exchange derivative assets	51	67
Interest receivable	86	84
Earmarked balances with banks	30	28
Employee loans and advances	49	33
Inter-corporate deposits	802	1,530
Others	24	16
Total	**1,065**	**1,781**

Other financial assets – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Security deposits	109	114
Earmarked balances with banks	24	-
Employee loans and advances	1	-
Inter-corporate deposits	40	4
Others	2	2
Total	**176**	**120**

Earmarked balances with banks primarily relate to margin money for purchase of investments, margin money for derivative contracts, unclaimed dividends and balance in escrow account for buy-back of equity shares.

Inter-corporate deposits placed with financial institutions yield fixed interest rate. Inter-corporate deposits include $129 million and $130 million as at March 31, 2022 and 2021, respectively, pertaining to trusts and TCS Foundation held for specified purposes.

Interest receivable includes $4 million and $5 million as at March 31, 2022 and 2021, respectively, pertaining to trusts and TCS Foundation held for specified purposes.

(e) Other financial liabilities

Other financial liabilities consist of the following:

Other financial liabilities – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Capital creditors	102	54
Fair value of foreign exchange derivative liabilities	17	13
Liabilities towards customer contracts	137	125
Accrued payroll	736	611
Unclaimed dividends	6	7
Others	17	28
Total	**1,015**	**838**

Other financial liabilities – Non-current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Capital creditors	45	-
Others	31	38
Total	**76**	**38**

Others include advance taxes paid of $30 million and $31 million as at March 31, 2022 and 2021, respectively, by the seller of TCS e-Serve Limited (merged with the Company) which, on refund by tax authorities, is payable to the seller.

(f) Financial instruments by category

The carrying value of financial instruments by categories as at March 31, 2022 is as follows:

	Fair value through profit or loss	Fair value through other comprehensive income	Derivative instruments in hedging relationship	Derivative instruments not in hedging relationship	Amortised cost	Total carrying value
	(In million of USD)					
Financial assets						
Cash and cash equivalents	-	-	-	-	1,650	1,650
Bank deposits	-	-	-	-	891	891
Investments	248	3,560	-	-	219	4,027
Trade receivables						
Billed	-	-	-	-	4,520	4,520
Unbilled	-	-	-	-	1,029	1,029
Earmarked balances with banks	-	-	-	-	54	54
Other financial assets	-	-	16	35	1,136	1,187
Total	**248**	**3,560**	**16**	**35**	**9,499**	**13,358**
Financial liabilities						
Trade payables	-	-	-	-	1,063	1,063
Lease liabilities	-	-	-	-	1,033	1,033
Other financial liabilities	-	-	3	14	1,074	1,091
Total	**-**	**-**	**3**	**14**	**3,170**	**3,187**

Other financial assets include inter-corporate deposits of $842 million, with original maturity period within 36 months.

The carrying value of financial instruments by categories as at March 31, 2021 is as follows:

	Fair value through profit or loss	Fair value through other comprehensive income	Derivative instruments in hedging relationship	Derivative instruments not in hedging relationship	Amortised cost	Total carrying value
	(In million of USD)					
Financial assets						
Cash and cash equivalents	-	-	-	-	934	934
Bank deposits	-	-	-	-	406	406
Investments	668	3,292	-	-	42	4,002
Trade receivables						
Billed	-	-	-	-	4,106	4,106
Unbilled	-	-	-	-	934	934
Earmarked balances with banks	-	-	-	-	28	28
Other financial assets	-	-	22	45	1,806	1,873
Total	**668**	**3,292**	**22**	**45**	**8,256**	**12,283**
Financial liabilities						
Trade payables	-	-	-	-	1,071	1,071
Lease liabilities	-	-	-	-	1,062	1,062
Other financial liabilities	-	-	-	13	863	876
Total	**-**	**-**	**-**	**13**	**2,996**	**3,009**

Other financial assets include inter-corporate deposits of $1,534 million, with original maturity period within 36 months..

Carrying amounts of cash and cash equivalents, trade receivables and trade payables as at March 31, 2022 and 2021, approximate the fair value due to their nature. Carrying amounts of bank deposits, earmarked balances with banks, other financial assets and other financial liabilities which are subsequently measured at amortised cost also approximate the fair value due to their nature in each of the periods presented. Fair value measurement of lease liabilities is not required. Fair value of investments carried at amortised cost is $220 million and $46 million as at March 31, 2022 and 2021, respectively.

(g) Fair value hierarchy

The fair value hierarchy is based on inputs to valuation techniques that are used to measure fair value that are either observable or unobservable and consists of the following three levels:

- Level 1 — Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2 — Inputs are other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 — Inputs are not based on observable market data (unobservable inputs). Fair values are determined in whole or in part using a valuation model based on assumptions that are neither supported by prices from observable current market transactions in the same instrument nor are they based on available market data.

The cost of unquoted investments included in Level 3 of fair value hierarchy approximate their fair value because there is a wide range of possible fair value measurements and the cost represents estimate of fair value within that range.

The following table summarises financial assets and liabilities measured at fair value on a recurring basis and financial assets that are not measured at fair value on a recurring basis (but fair value disclosures are required):

As at March 31, 2022	Level 1	Level 2	Level 3	Total
	(In million of USD)			
Financial assets				
Mutual fund units	248	-	-	248
Equity shares	-	-	5	5
Government bonds and securities	3,416	-	-	3,416
Certificate of deposits	13	-	-	13
Corporate bonds	165	-	-	165
Commercial papers	50	-	-	50
Treasury bills	131	-	-	131
Fair value of foreign exchange derivative assets	-	51	-	51
Total	**4,023**	**51**	**5**	**4,079**
Financial liabilities				
Fair value of foreign exchange derivative liabilities	-	17	-	17
Total	**-**	**17**	**-**	**17**

As at March 31, 2021	Level 1	Level 2	Level 3	Total
	(In million of USD)			
Financial assets				
Mutual fund units	660	-	8	668
Equity shares	-	-	5	5
Government bonds and securities	3,253	-	-	3,253
Corporate bonds	62	-	-	62
Commercial papers	18	-	-	18
Fair value of foreign exchange derivative assets	-	67	-	67
Total	**3,993**	**67**	**13**	**4,073**
Financial liabilities				
Fair value of foreign exchange derivative liabilities	-	13	-	13
Total	**-**	**13**	**-**	**13**

Reconciliation of Level 3 fair value measurement of financial assets is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**13**	**6**
Additions during the year	-	7
Impairment in value of investments	(1)	-
Other adjustments during the year	(7)	-
Balance at the end of the year	**5**	**13**

(h) Derivative financial instruments and hedging activity

The Group's revenue is denominated in various foreign currencies. Given the nature of the business, a large portion of the costs are denominated in Indian Rupee. This exposes the Group to currency fluctuations.

The Board of Directors has constituted a Risk Management Committee (RMC) to frame, implement and monitor the risk management plan of the Group which inter-alia covers risks arising out of exposure to foreign currency fluctuations. Under the guidance and framework provided by the RMC, the Group uses various derivative instruments such as foreign exchange forward, currency options and futures contracts in which the counter party is generally a bank.

The following are outstanding currency options contracts, which have been designated as cash flow hedges:

Foreign currency	As at March 31, 2022			As at March 31, 2021		
	No. of contracts	Notional amount of contracts (In million)	Fair value (In million of USD)	No. of contracts	Notional amount of contracts (In million)	Fair value (In million of USD)
US Dollar	63	1,635	6	63	1,615	7
Great Britain Pound	41	338	7	64	330	2
Euro	53	382	3	60	346	11
Australian Dollar	30	202	(3)	38	206	2
Canadian Dollar	25	137	-	23	114	-

The movement in cash flow hedging reserve for derivatives designated as cash flow hedges is as follows:

	Year ended March 31, 2022		Year ended March 31, 2021	
	Intrinsic value	Time value	Intrinsic value	Time value
	(In million of USD)		(In million of USD)	
Balance at the beginning of the year	**(3)**	**(10)**	**(5)**	**(16)**
(Gain) / Loss transferred to profit or loss on occurrence of forecasted hedge transactions	(86)	70	(47)	71
Deferred tax on (gain) / loss transferred to profit or loss on occurrence of forecasted hedge transactions	18	(18)	11	(17)
Change in the fair value of effective portion of cash flow hedges	81	(75)	49	(63)
Deferred tax on change in the fair value of effective portion of cash flow hedges	(17)	18	(11)	15
Balance at the end of the year	**(7)**	**(15)**	**(3)**	**(10)**

The Group has entered into derivative instruments not in hedging relationship by way of foreign exchange forward, currency options and futures contracts. As at March 31, 2022 and 2021, the notional amount of outstanding contracts aggregated to $6,129 million and $5,124 million, respectively and the respective fair value of these contracts have a net gain of $21 million and $32 million.

Exchange gain of $87 million and $66 million on foreign exchange forward, currency options and futures contracts that do not qualify for hedge accounting have been recognised in profit or loss for the years ended March 31, 2022 and 2021, respectively.

Net foreign exchange gain include gain of $16 million and loss of $24 million transferred from cash flow hedging reserve for the years ended March 31, 2022 and 2021, respectively.

Net loss on derivative instruments of $22 million, recognised in accumulated other comprehensive income as at March 31, 2022, is expected to be transferred to profit or loss by March 31, 2023. The maximum period over which the exposure to cash flow variability has been hedged is through calendar year 2022.

Following table summarises approximate gain / (loss) on Group's other comprehensive income on account of appreciation / depreciation of the underlying foreign currencies.

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
10% Appreciation of the underlying foreign currencies	(51)	(42)
10% Depreciation of the underlying foreign currencies	269	260

(i) Financial risk management

The Group is exposed primarily to fluctuations in foreign currency exchange rates, credit, liquidity and interest rate risks, which may adversely impact

the fair value of its financial instruments. The Group has a risk management policy which covers risks associated with the financial assets and liabilities. The risk management policy is approved by the Board of Directors. The focus of the risk management committee is to assess the unpredictability of the financial environment and to mitigate potential adverse effects on the financial performance of the Group.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Such changes in the values of financial instruments may result from changes in the foreign currency exchange rates, interest rates, credit, liquidity and other market changes. The Group's exposure to market risk is primarily on account of foreign currency exchange rate risk.

- **Foreign currency exchange rate risk**

  The fluctuation in foreign currency exchange rates may have potential impact on the statement of profit or loss and other comprehensive income and equity, where any transaction references more than one currency or where assets / liabilities are denominated in a currency other than the functional currency of the respective entities. Considering the countries and economic environment in which the Group operates, its operations are subject to risks arising from fluctuations in exchange rates in those countries.

  The Group, as per its risk management policy, uses derivative instruments primarily to hedge foreign exchange. Further, any movement in the functional currencies of the various operations of the Group against major foreign currencies may impact the Group's revenue in international business.

The Group evaluates the impact of foreign exchange rate fluctuations by assessing its exposure to exchange rate risks. It hedges a part of these risks by using derivative financial instruments in line with its risk management policies.

The foreign exchange rate sensitivity is calculated by aggregation of the net foreign exchange rate exposure and a simultaneous parallel foreign exchange rates shift of all the currencies by 10% against the respective functional currencies of Tata Consultancy Services Limited and its subsidiaries.

The following analysis has been worked out based on the net exposures for each of the subsidiaries and Tata Consultancy Services Limited as at the date of statement of financial position which could affect the statement of profit or loss and other comprehensive income and equity. Further the exposure as indicated below is mitigated by some of the derivative contracts entered into by the Group as disclosed in note 9(h).

The following table sets forth information relating to unhedged foreign currency exposure as at March 31, 2022:

	USD	EUR	GBP	Others
	(In million of USD)			
Net financial assets	383	22	11	163
Net financial liabilities	(1,135)	(58)	(170)	(56)

10% appreciation / depreciation of the respective functional currency of Tata Consultancy Services Limited and it subsidiaries with respect to various foreign currencies would result in increase / decrease in the Group's profit before taxes by approximately $84 million for the year ended March 31, 2022.

The following table sets forth information relating to unhedged foreign currency exposure as at March 31, 2021:

	USD	EUR	GBP	Others
	(In million of USD)			
Net financial assets	435	21	14	154
Net financial liabilities	(6)	(78)	(48)	(56)

10% appreciation / depreciation of the respective functional currency of Tata Consultancy Services Limited and it subsidiaries with respect to various foreign currencies would result in increase / decrease in the Group's profit before taxes by approximately $44 million for the year ended March 31, 2021.

- **Interest rate risk**

  The Group's investments are primarily in fixed rate interest bearing investments. Hence, the Group is not significantly exposed to interest rate risk.

Credit risk

Credit risk is the risk of financial loss arising from counterparty failure to repay or service debt according to the contractual terms or obligations. Credit risk encompasses of both, the direct risk of default and the risk of deterioration of creditworthiness as well as concentration of risks. Credit risk is controlled by analysing credit limits and creditworthiness of customers on a continuous basis to whom the credit has been granted after obtaining necessary approvals for credit.

Financial instruments that are subject to concentrations of credit risk principally consist of trade receivables, unbilled receivables, investments, derivative financial instruments, cash and cash equivalents, bank deposits and other financial assets. Inter-corporate deposits of $842 million are with a financial institution having a high credit-rating assigned by credit-rating agencies. Bank deposits include an amount of $889 million held with four Indian banks having high credit rating which are individually in excess of 10% or more of the Group's total bank deposits as at March 31, 2022. None of the other financial instruments of the Group result in material concentration of credit risk.

- **Exposure to credit risk**

  The carrying amount of financial assets and contract assets represents the maximum credit exposure. The maximum exposure to credit risk was $13,937 million and $12,834 million as at March 31, 2022 and 2021,respectively, being the total of the carrying amount of balances with banks, bank deposits, investments, trade receivables, unbilled receivables, contract assets and other financial assets.

  The Group's exposure to customers is diversified and no single customer contributes to more than 10% of outstanding trade receivables, unbilled receivables and contract assets as at March 31, 2022 and 2021.

- **Geographic concentration of credit risk**

  Geographic concentration of trade receivables (gross and net of allowances) and contract assets is as follows:

	As at March 31, 2022		As at March 31, 2021	
	Gross %	Net %	Gross %	Net %
United States of America	43.79	44.69	41.08	41.83
United Kingdom	16.47	16.86	16.37	16.75
India	15.51	13.83	20.31	18.79

Geographical concentration of trade receivables and contract assets is allocated based on the location of the customers.

The allowance for lifetime expected credit loss on trade receivables for the years ended March 31, 2022 and 2021 was $17 million and $26 million respectively. The reconciliation of allowance for doubtful trade receivables is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**175**	**151**
Changes during the year	17	26
Bad debts written off	(11)	(5)
Translation exchange difference	(5)	3
Balance at the end of the year	**176**	**175**

Liquidity risk

Liquidity risk refers to the risk that the Group cannot meet its financial obligations. The objective of liquidity risk management is to maintain sufficient liquidity and ensure that funds are available for use as per requirements. The Group consistently generated sufficient cash flows from operations to meet its financial obligations including lease liabilities as and when they fall due.

The tables below provide details regarding the contractual maturities of significant financial liabilities as at:

March 31, 2022	Due in 1st year	Due in 2nd year	Due in 3rd to 5th year	Due after 5th year	Total
	(In million of USD)				
Non-derivative financial liabilities					
Trade payables	1,063	-	-	-	1,063
Lease liabilities	244	214	423	416	1,297
Other financial liabilities	1,001	45	31	1	1,078
	2,308	**259**	**454**	**417**	**3,438**
Derivative financial liabilities	17	-	-	-	17
	2,325	**259**	**454**	**417**	**3,455**

March 31, 2021	Due in 1st year	Due in 2nd year	Due in 3rd to 5th year	Due after 5th year	Total
	(In million of USD)				
Non-derivative financial liabilities					
Trade payables	1,071	-	-	-	1,071
Lease liabilities	237	218	453	478	1,386
Other financial liabilities	825	7	31	-	863
	2,133	**225**	**484**	**478**	**3,320**
Derivative financial liabilities	13	-	-	-	13
	2,146	**225**	**484**	**478**	**3,333**

(j) Equity instruments

The authorised, issued, subscribed and fully paid up share capital consist of the following:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Authorised		
Equity shares of ₹1 each (4,600,500,000 shares and 4,600,500,000 shares)	86	86
Preference shares of ₹1 each (1,050,250,000 shares and 1,050,250,000 shares)	20	20
	106	**106**
Issued, Subscribed and Fully paid up		
Opening balance of equity shares of ₹1 each (3,699,051,373 shares and 3,752,384,706 shares)	69	70
Equity shares of ₹1 each extinguished on buy-back (40,000,000 shares and 53,333,333 shares)	(1)	(1)
Total	**68**	**69**

The Company's objective for capital management is to maximise shareholder value, safeguard business continuity and support the growth of the Company. The Company determines the capital requirement based on annual operating plans and long-term and other strategic investment plans. The funding requirements are met through equity and operating cash flows generated. The Company is not subject to any externally imposed capital requirements.

The Board of Directors at its meeting held on January 12, 2022, approved a proposal to buy-back upto 40,000,000 equity shares of the Company for an aggregate amount not exceeding ₹18,000 crore (USD equivalent $2,378 million), being 1.08% of the total paid up equity share capital at ₹4,500 (USD equivalent $59.45) per equity share. The shareholders approved the same on February 12, 2022, by way of a special resolution through postal ballot. A Letter of Offer was made to all eligible shareholders. The Company bought back 40,000,000 equity shares out of the shares that were tendered by eligible shareholders and extinguished the equity shares on March 29, 2022.

10) Leases

A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Group as a lessee

The Group accounts for each lease component within the contract as a lease separately from non-lease components of the contract and allocates the consideration in the contract to each lease component on the basis of the relative standalone price of the lease component and the aggregate standalone price of the non-lease components.

The Group recognises right-of-use asset representing its right to use the underlying asset for the lease term at the lease commencement date. The

cost of the right-of-use asset measured at inception shall comprise of the amount of the initial measurement of the lease liability adjusted for any lease payments made at or before the commencement date less any lease incentives received, plus any initial direct costs incurred and an estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset or restoring the underlying asset or site on which it is located. The right-of-use assets is subsequently measured at cost less any accumulated depreciation, accumulated impairment losses, if any and adjusted for any remeasurement of the lease liability. The right-of-use assets is depreciated using the straight-line method from the commencement date over the shorter of lease term or useful life of right-of-use asset. The estimated useful lives of right-of-use assets are determined on the same basis as those of property, plant and equipment. Right-of-use assets are tested for impairment whenever there is any indication that their carrying amounts may not be recoverable. Impairment loss, if any, is recognised in profit or loss.

The Group measures the lease liability at the present value of the lease payments that are not paid at the commencement date of the lease. The lease payments are discounted using the interest rate implicit in the lease, if that rate can be readily determined. If that rate cannot be readily determined, the Group uses incremental borrowing rate. For leases with reasonably similar characteristics, the Group, on a lease-by-lease basis, may adopt either the incremental borrowing rate specific to the lease or the incremental borrowing rate for the portfolio as a whole. The lease payments shall include fixed payments, variable lease payments, residual value guarantees, exercise price of a purchase option where the Group is reasonably certain to exercise that option and payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease. The lease liability is subsequently remeasured by increasing the carrying amount to reflect interest on the lease liability, reducing the carrying amount to reflect the lease payments made and remeasuring the carrying amount to reflect any reassessment or lease modifications or to reflect revised in-substance fixed lease payments. The Group recognises the amount of the re-measurement of lease liability due to modification as an adjustment to the right-of-use asset and profit or loss depending upon the nature of modification. Where the carrying amount of the right-of-use asset is reduced to zero and there is a further reduction in the measurement of the lease liability, the Group recognises any remaining amount of the re-measurement in profit or loss.

The Group has elected not to apply the requirements of IFRS 16 Leases to short-term leases of all assets that have a lease term of 12 months or less and leases for which the underlying asset is of low value. The lease payments associated with these leases are recognised as an expense on a straight-line basis over the lease term.

Group as a lessor

At the inception of the lease, the Group classifies each of its leases as either an operating lease or a finance lease. The Group recognises lease payments received under operating leases as income on a straight-line basis over the lease term. In case of a finance lease, finance income is recognised over the lease term based on a pattern reflecting a constant periodic rate of return on the lessor's net investment in the lease. When the Group is an intermediate lessor it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, the Group applies IFRS 15 Revenue from contracts with customers to allocate the consideration in the contract.

The details of the right-of-use assets held by the Group is as follows:

	Additions for the year ended March 31, 2022	Net carrying amount as at March 31, 2022
	(In million of USD)	
Leasehold land	13	102
Buildings	181	870
Leasehold improvements	-	3
Computer equipment	1	11
Furniture, fixtures, office equipment and other assets	2	5
Software licences	20	18
Total	**217**	**1,009**

	Additions for the year ended March 31, 2021	Net carrying amount as at March 31, 2021
	(In million of USD)	
Leasehold land	-	93
Buildings	166	921
Leasehold improvements	1	4
Computer equipment	14	14
Furniture, fixtures, office equipment and other assets	4	5
Software licences	3	3
Total	**188**	**1,040**

Depreciation on right-of-use assets is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Leasehold land	1	1
Buildings	197	196
Leasehold improvements	1	1
Computer equipment	3	2
Furniture, fixtures, office equipment and other assets	2	2
Software licences	5	-
Total	**209**	**202**

Interest on lease liabilities is $70 million and $71 million for the years ended March 31, 2022 and 2021, respectively.

The Group incurred $37 million and $48 million for the years ended March 31, 2022 and 2021, respectively, towards expenses relating to short-term leases and leases of low-value assets.

The total cash outflow for leases is $298 million and $313 million for the years ended March 31, 2022 and 2021, respectively, including cash outflow for short-term leases and leases of low-value assets.

The Group has lease term extension options that are not reflected in the measurement of lease liabilities. The present value of future cash outflows for such extension periods is $102 million and $61 million as at March 31, 2022 and 2021, respectively.

Lease contracts entered by the Group majorly pertains for buildings taken on lease to conduct its business in the ordinary course.

The Group does not have any lease restrictions and commitment towards variable rent as per the contract.

11) Non-financial assets and non-financial liabilities

(a) Property, plant and equipment

Property, plant and equipment are stated at cost comprising of purchase price and any initial directly attributable cost of bringing the asset to its working condition for its intended use, less accumulated depreciation (other than freehold land) and impairment loss, if any.

Depreciation is provided for property, plant and equipment on a straight-line basis so as to expense the cost less residual value over their estimated useful lives based on a technical evaluation. The estimated useful lives and residual values are reviewed at the end of each reporting period, with the effect of any change in estimate accounted for on a prospective basis.

The estimated useful lives are as mentioned below:

Type of asset	Useful lives
Buildings	20 years
Leasehold improvements	Lease term
Computer equipment	4 years
Furniture, fixtures, office equipment and other assets	2-10 years

Depreciation is not recorded on capital work-in-progress until construction and installation are complete and the asset is ready for its intended use. Capital work-in-progress includes capital advances.

Property, plant and equipment with finite life are evaluated for recoverability whenever there is any indication that their carrying amounts may not be recoverable. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) is determined on an individual asset basis unless the asset does not generate cash flows that are largely independent of those from other assets. In such cases, the recoverable amount is determined for the cash generating unit (CGU) to which the asset belongs.

If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. An impairment loss is recognised in profit or loss.

Property, plant and equipment consist of the following:

	Freehold land	Buildings	Leasehold improve-ments	Computer equipment	Furniture, fixtures, office equipment and other assets	Total
	(In million of USD)					
Cost as at April 1, 2021	**48**	**1,060**	**339**	**1,462**	**995**	**3,904**
Additions	-	7	15	250	43	315
Disposals	-	-	(7)	(69)	(26)	(102)
Translation exchange difference	(1)	(32)	(9)	(47)	(24)	(113)
Cost as at March 31, 2022	**47**	**1,035**	**338**	**1,596**	**988**	**4,004**
Accumulated depreciation as at April 1, 2021	**-**	**(401)**	**(214)**	**(1,030)**	**(747)**	**(2,392)**
Depreciation	-	(53)	(28)	(208)	(71)	(360)
Disposals	-	-	7	69	22	98
Translation exchange difference	-	13	6	34	19	72
Accumulated depreciation as at March 31, 2022	**-**	**(441)**	**(229)**	**(1,135)**	**(777)**	**(2,582)**
Net carrying amount as at March 31, 2022	**47**	**594**	**109**	**461**	**211**	**1,422**
Capital work-in-progress*						174
Total						**1,596**

*$315 million has been capitalised and transferred to property, plant and equipment during year ended March 31, 2022.

	Freehold land	Buildings	Leasehold improve-ments	Computer equipment	Furniture, fixtures, office equipment and other assets	Total
	(In million of USD)					
Cost as at April 1, 2020	**46**	**1,023**	**320**	**1,165**	**949**	**3,503**
Additions	1	10	19	277	41	348
Disposals	-	(1)	(10)	(24)	(24)	(59)
Translation exchange difference	1	28	10	44	29	112
Cost as at March 31, 2021	**48**	**1,060**	**339**	**1,462**	**995**	**3,904**
Accumulated depreciation as at April 1, 2020	-	(339)	(190)	(853)	(672)	(2,054)
Depreciation	-	(53)	(27)	(169)	(77)	(326)
Disposals	-	1	9	23	23	56
Translation exchange difference	-	(10)	(6)	(31)	(21)	(68)
Accumulated depreciation as at March 31, 2021	**-**	**(401)**	**(214)**	**(1,030)**	**(747)**	**(2,392)**
Net carrying amount as at March 31, 2021	**48**	**659**	**125**	**432**	**248**	**1,512**
Capital work-in-progress*						141
Total						**1,653**

*$348 million has been capitalised and transferred to property, plant and equipment during the year ended March 31, 2021.

(b) Goodwill

Goodwill represents the cost of acquired business as established at the date of acquisition of the business in excess of the acquirer's interest in the net fair value of the identifiable assets, liabilities and contingent liabilities less accumulated impairment losses, if any. Goodwill is tested for impairment annually or when events or circumstances indicate that the implied fair value of goodwill is less than its carrying amount.

CGUs to which goodwill has been allocated are tested for impairment annually, or more frequently when there is indication for impairment. The financial projections basis which the future cash flows have been estimated consider the increase in economic uncertainties due to COVID-19, reassessment of the discount rates, revisiting the growth rates factored while arriving at terminal value and subjecting these variables to sensitivity analysis. If the recoverable amount of a CGU is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit pro-rata on the basis of the carrying amount of each asset in the unit.

Goodwill consists of the following:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**538**	**510**
Translation exchange difference	(18)	28
Balance at the end of the year	**520**	**538**

Goodwill of $283 million and $292 million as at March 31, 2022 and 2021 has been allocated to TCS business process services (BPS) CGU.

The Group estimated the value-in-use of TCS BPS based on future cash flows of this CGU using a 5.00% annual growth rate for periods subsequent to the forecast period of 5 years and discount rate of 15.00%. An analysis of the sensitivity of the computation to a change in key parameters (operating margin, discount rates and long term average growth rate), based on reasonable assumptions, did not identify any probable scenario in which the recoverable amount of the CGU would decrease below its carrying amount.

Goodwill of $86 million and $90 million as at March 31, 2022 and 2021 has been allocated to the TCS business in France. The estimated value-in-use of this CGU is based on the future cash flows using a 1.50% annual growth rate for periods subsequent to the forecast period of 5 years and discount rate of 9.30%. An analysis of the sensitivity of the computation to a change in key parameters (operating margin, discount rates and long term average growth rate), based on reasonable assumptions, did not identify any probable scenario in which the recoverable amount of the CGU would decrease below its carrying amount.

The remaining amount of goodwill of $151 million and $156 million as at March 31, 2022 and 2021, respectively, (relating to different CGUs individually immaterial) has been evaluated based on the cash flow forecasts of the related CGUs and the recoverable amounts of these CGUs exceeded their carrying amounts.

(c) Other intangible assets

Intangible assets purchased including acquired in business combination, are measured at cost as at the date of acquisition, as applicable, less accumulated amortisation and accumulated impairment, if any.

Intangible assets consist of rights under licensing agreement and software licences and customer-related intangibles.

Following table summarises the nature of intangibles and their estimated useful lives:

Type of asset	Useful lives
Rights under licensing agreement and software licences	Lower of licence period and 2-5 years
Customer-related intangibles	3 years

Intangible assets are amortised on a straight-line basis over the period of its economic useful life.

Intangible assets with finite life are evaluated for recoverability whenever there is any indication that their carrying amounts may not be recoverable. If any such indication exists, the recoverable amount (i.e. higher of the fair value less cost to sell and the value-in-use) is determined on an individual asset basis unless the asset does not generate cash flows that are largely independent of those from other assets. In such cases, the recoverable amount is determined for the cash generating unit (CGU) to which the asset belongs.

If the recoverable amount of an asset (or CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or CGU) is reduced to its recoverable amount. An impairment loss is recognised in profit or loss.

Intangible assets consist of the following:

	Rights under licensing agreement and software licences	Customer-related intangibles	Total
	(In million of USD)		
Cost as at April 1, 2021	**100**	**18**	**118**
Additions	134	-	134
Disposals / Derecognised	(6)	-	(6)
Translation exchange difference	(5)	(1)	(6)
Cost as at March 31, 2022	**223**	**17**	**240**
Accumulated amortisation as at April 1, 2021	**(36)**	**(17)**	**(53)**
Amortisation	(47)	(1)	(48)
Disposals / Derecognised	4	-	4
Translation exchange difference	1	1	2
Accumulated amortisation as at March 31, 2022	**(78)**	**(17)**	**(95)**
Net carrying amount as at March 31, 2022	**145**	**-**	**145**

	Rights under licensing agreement and software licences	Customer-related intangibles	Total
	(In million of USD)		
Cost as at April 1, 2020	**59**	**17**	**76**
Additions	48	-	48
Disposals / Derecognised	(9)	-	(9)
Translation exchange difference	2	1	3
Cost as at March 31, 2021	**100**	**18**	**118**
Accumulated amortisation as at April 1, 2020	**(24)**	**(15)**	**(39)**
Amortisation	(20)	(1)	(21)
Disposals / Derecognised	9	-	9
Translation exchange difference	(1)	(1)	(2)
Accumulated amortisation as at March 31, 2021	**(36)**	**(17)**	**(53)**
Net carrying amount as at March 31, 2021	**64**	**1**	**65**

Function wise amortisation of intangible assets is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Cost of revenue	41	18
Selling, general and administrative expenses	7	3
Total	48	21

The estimated amortisation for the years subsequent to March 31, 2022 is as follows:

Year ending March 31,	Amortisation expense
	(In million of USD)
2023	61
2024	53
2025	28
2026	3
Thereafter	-
Total	**145**

(d) Other assets

Other assets consist of the following:

Other assets – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Advances to suppliers	27	22
Contract assets	561	522
Prepaid expenses	396	634
Prepaid rent	2	4
Contract fulfillment costs	142	108
Indirect taxes recoverable	173	203
Others	43	39
Total	**1,344**	**1,532**

Other assets – Non-current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Contract assets	23	34
Prepaid expenses	171	85
Contract fulfillment costs	20	31
Others	37	56
Total	**251**	**206**

Non-current – Others includes advance of $36 million and $50 million towards acquiring right-of-use of leasehold land as at March 31, 2022 and 2021, respectively.

Contract fulfillment costs of $108 million and $77 million for the years ended March 31, 2022 and 2021, respectively, have been amortised in the profit or loss. Refer note 12 for changes in contract assets.

(e) Other liabilities

Other liabilities consist of the following:

Other liabilities – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Advances received from customers	62	42
Indirect taxes payable and other statutory liabilities	480	508
Tax liability on buy-back of equity shares*	554	-
Others	12	4
Total	**1,108**	**554**

* Refer note 9(j)

(f) Provisions

Provisions consist of the following:

Provisions – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Provision towards legal claim (Refer note 19)	165	165
Provision for foreseeable loss	17	20
Other provisions	4	4
Total	**186**	**189**

12) Revenue recognition

The Group earns revenue primarily from providing IT services, consulting and business solutions. The Group offers a consulting-led, cognitive powered, integrated portfolio of IT, business and engineering services and solutions.

Revenue is recognised upon transfer of control of promised products or services to customers in an amount that reflects the consideration which the Group expects to receive in exchange for those products or services.

- Revenue from time and material and job contracts is recognised on output basis measured by units delivered, efforts expended, number of transactions processed, etc.
- Revenue related to fixed price maintenance and support services contracts where the Group is standing ready to provide services is recognised based on time elapsed mode and revenue is straight-lined over the period of performance.

- In respect of other fixed-price contracts, revenue is recognised using percentage-of-completion method ('POC method') of accounting with contract costs incurred determining the degree of completion of the performance obligation. The contract costs used in computing the revenues include cost of fulfilling warranty obligations.
- Revenue from the sale of distinct internally developed software and manufactured systems and third party software is recognised upfront at the point in time when the system / software is delivered to the customer. In cases where implementation and / or customisation services rendered significantly modifies or customises the software, these services and software are accounted for as a single performance obligation and revenue is recognised over time on a POC method.
- Revenue from the sale of distinct third party hardware is recognised at the point in time when control is transferred to the customer.
- The solutions offered by the Group may include supply of third-party equipment or software. In such cases, revenue for supply of such third party products are recorded at gross or net basis depending on whether the Group is acting as the principal or as an agent of the customer. The Group recognises revenue in the gross amount of consideration when it is acting as a principal and at net amount of consideration when it is acting as an agent.

Revenue is measured based on the transaction price, which is the consideration, adjusted for volume discounts, service level credits, performance bonuses, price concessions and incentives, if any, as specified in the contract with the customer. Revenue also excludes taxes collected from customers.

The Group's contracts with customers could include promises to transfer multiple products and services to a customer. The Group assesses the products / services promised in a contract and identifies distinct performance obligations in the contract. Identification of distinct performance obligation involves judgement to determine the deliverables and the ability of the customer to benefit independently from such deliverables.

Judgement is also required to determine the transaction price for the contract and to ascribe the transaction price to each distinct performance obligation. The transaction price could be either a fixed amount of customer consideration or variable consideration with elements such as volume discounts, service level credits, performance bonuses, price concessions and incentives. The transaction price is also adjusted for the effects of the time value of money if the contract includes a significant financing component. Any consideration payable to the customer is adjusted to the transaction price, unless it is a payment for a distinct product or service from the customer. The estimated amount of variable consideration is adjusted in the transaction price only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur and is reassessed at the end of each reporting period. The Group allocates the elements of variable considerations to all the performance obligations of the contract unless there is observable evidence that they pertain to one or more distinct performance obligations.

The Group exercises judgement in determining whether the performance obligation is satisfied at a point in time or over a period of time. The Group considers indicators such as how customer consumes benefits as services are rendered or who controls the asset as it is being created or existence of enforceable right to payment for performance to date and alternate use of such product or service, transfer of significant risks and rewards to the customer, acceptance of delivery by the customer, etc.

Contract fulfilment costs are generally expensed as incurred except for certain software licence costs which meet the criteria for capitalisation. Such costs are amortised over the contractual period or useful life of licence, whichever is less. The assessment of this criteria requires the application of judgement, in particular when considering if costs generate or enhance resources to be used to satisfy future performance obligations and whether costs are expected to be recovered.

Contract assets are recognised when there are excess of revenues earned over billings on contracts. Contract assets are classified as unbilled receivables (only act of invoicing is pending) when there is unconditional right to receive cash, and only passage of time is required, as per contractual terms.

Unearned and deferred revenue ("contract liability") is recognised when there are billings in excess of revenues.

The billing schedules agreed with customers include periodic performance based payments and / or milestone based progress payments. Invoices are payable within contractually agreed credit period.

In accordance with IAS 37, the Group recognises an onerous contract provision when the unavoidable costs of meeting the obligations under a contract exceed the economic benefits to be received.

Contracts are subject to modification to account for changes in contract specification and requirements. The Group reviews modification to contract in conjunction with the original contract, basis which the transaction price could be allocated to a new performance obligation or transaction price of an existing obligation could undergo a change. In the event transaction price is revised for existing obligation, a cumulative adjustment is accounted for.

The Group disaggregates revenue from contracts with customers by nature of services, industry verticals and geography.

Revenue disaggregation by nature of services is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Consultancy services	25,511	21,949
Sale of equipment and software licences	196	225
Total	**25,707**	**22,174**

Revenue disaggregation by industry vertical and geography has been included in segment information (Refer note 18).

While disclosing the aggregate amount of transaction price yet to be recognised as revenue towards unsatisfied (or partially satisfied) performance obligations, along with the broad time band for the expected time to recognise those revenues, the Group has applied the practical expedient in IFRS 15. Accordingly, the Group has not disclosed the aggregate transaction price allocated to unsatisfied (or partially satisfied) performance obligations which pertain to contracts where revenue recognised corresponds to the value transferred to customer typically involving time and material, outcome based and event based contracts.

Unsatisfied (or partially satisfied) performance obligations are subject to variability due to several factors such as terminations, changes in scope of contracts, periodic revalidations of the estimates, economic factors (changes in currency rates, tax laws etc). The aggregate value of transaction price allocated to unsatisfied (or partially satisfied) performance obligations is $15,043 million out of which 56.54% is expected to be recognised as revenue in the next year and the balance thereafter. No consideration from contracts with customers is excluded from the amount mentioned above.

Changes in contract assets are as follows:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**556**	**595**
Invoices raised that were included in the contract assets balance at the beginning of the year	(422)	(472)
Increase due to revenue recognised during the year, excluding amounts billed during the year	463	403
Translation exchange difference	(13)	30
Balance at the end of the year	**584**	**556**

Changes in unearned and deferred revenue are as follows:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Balance at the beginning of the year	**660**	**478**
Revenue recognised that was included in the unearned and deferred revenue at the beginning of the year	(436)	(406)
Increase due to invoicing during the year, excluding amounts recognised as revenue during the year	415	565
Translation exchange difference	(12)	23
Balance at the end of the year	**627**	**660**

13) Cost recognition

Costs and expenses are recognised when incurred and have been classified according to their primary functions in the following categories:

Cost of revenue

These costs primarily include employee compensation of personnel engaged in providing services, travel expenses, fees to external consultants, cost of equipment and software licences, depreciation and amortisation of production related equipment and software, facility expenses, communication expenses and other project related expenses.

Selling, general and administrative expenses

Selling costs primarily include employee compensation for sales and marketing personnel, travel expenses, advertising, business promotion expenses, bad debts and advances written off, allowance for doubtful trade receivables and advances, facility expenses for sales and marketing offices and market research costs.

General and administrative costs primarily include employee compensation for administrative, supervisory, managerial and practice management personnel, depreciation and amortisation expenses of non-production equipment and software, facility expenses for administrative offices, communication expenses, fees to external consultants and other general expenses.

Expenses by nature

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Employee cost	14,419	12,397
Fees to external consultants	2,332	1,785
Facility expenses	286	288
Depreciation and amortisation expense	617	549
Cost of equipment and software licences	156	198
Travel expenses	213	146
Communication expenses	275	256
Bad debts and advances written off, allowance for doubtful trade receivables and advances (net)	18	27
Provision towards legal claim (Refer note 19)	-	165
Other expenses	895	787
Total	**19,211**	**16,598**

Refer note 16 for function wise bifurcation of employee cost.

14) Other income

(a) Finance and other income

Dividend income is recorded when the right to receive payment is established. Interest income is recognised using effective interest method.

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Dividend received	-	1
Interest on bank balances and bank deposits	39	18
Interest on financial assets carried at fair value through OCI	245	238
Interest on financial assets carried at amortised cost	72	79
Others	1	3
Total	**358**	**339**

(b) Finance costs

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Interest on lease liabilities	70	71
Interest on tax matters	29	13
Other interest costs	6	2
Total	**105**	**86**

(c) Other gains (net)

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Net gain on disposal of property, plant and equipment	3	2
Net gain on lease modification	1	14
Net loss on sub-lease	(1)	-
Net gain on disposal / fair valuation of investments carried at fair value through profit or loss	27	28
Net foreign exchange gain	139	34
Others	12	7
Total	**181**	**85**

15) Income taxes

Income tax expense comprises current tax expense and the net change in the deferred tax asset or liability during the year. Current and deferred taxes are recognised in profit or loss, except when they relate to items that are recognised in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognised in other comprehensive income or directly in equity, respectively.

Current income taxes

The current income tax expense includes income taxes payable by the Company and its subsidiaries in India and overseas. The current tax payable by the Company and its subsidiaries in India is Indian income tax payable on worldwide income after taking credit for tax relief available for export operations in Special Economic Zones (SEZs).

Current income tax payable by overseas branches of the Company is computed in accordance with the tax laws applicable in the jurisdiction in which the respective branch operates. The taxes paid are generally available for set off against the Indian income tax liability of the Company's worldwide income.

The current income tax expense for overseas subsidiaries has been computed based on the tax laws applicable to each subsidiary in the respective jurisdiction in which it operates.

Advance taxes and provisions for current income taxes are presented in the statement of financial position after off-setting advance tax paid and income tax provision arising in the same tax jurisdiction and where the relevant tax paying unit intends to settle the asset and liability on a net basis.

Deferred income taxes

Deferred income tax is recognised using the balance sheet approach. Deferred income tax assets and liabilities are recognised for deductible and taxable temporary differences arising between the tax base of assets and liabilities and their carrying amount, except when the deferred income tax arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and affects neither accounting nor taxable profit or loss at the time of the transaction.

Deferred income tax assets are recognised to the extent that it is probable that taxable profit will be available against which the deductible temporary differences and the carry forward of unused tax credits and unused tax losses can be utilised.

The carrying amount of deferred income tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred income tax asset to be utilised.

Deferred income tax liabilities are recognised for all taxable temporary differences except in respect of taxable temporary differences associated with investments in subsidiaries where the timing of the reversal of the temporary difference can be controlled and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred tax assets and liabilities are measured using substantively enacted tax rates expected to apply to taxable income in years in which the temporary differences are expected to be received or settled.

For operations carried out in SEZs, deferred tax assets or liabilities, if any, have been established for the tax consequences of those temporary differences between the carrying values of assets and liabilities and their respective tax bases that reverse after the tax holiday ends.

Deferred tax assets and liabilities are offset when they relate to income taxes levied by the same taxation authority and the relevant entity intends to settle its current tax assets and liabilities on a net basis.

Deferred tax assets include Minimum Alternate Tax (MAT) paid in accordance with the tax laws in India, to the extent it would be available for set off against future current income tax liability. Accordingly, MAT is recognised as deferred tax asset in the statement of financial position when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised.

The income tax expense consists of the following:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Current tax		
Current tax expense for current year	1,922	1,585
Current tax benefit pertaining to prior years	(91)	(14)
	1,831	**1,571**
Deferred tax		
Deferred tax benefit for current year	(45)	(47)
Deferred tax benefit pertaining to prior years	(11)	(11)
	(56)	**(58)**
Total	**1,775**	**1,513**

The reconciliation of estimated income tax expense at Indian statutory income tax rate to income tax expense reported in statements of profit or loss is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Profit before taxes	6,930	5,914
Indian statutory income tax rate	34.94%	34.94%
Expected income tax expense	2,421	2,066
Tax effect of adjustments to reconcile expected income tax expense to reported income tax expense		
Tax holidays	(642)	(636)
Income exempt from tax	(53)	(44)
Undistributed earnings in branches and subsidiaries	(6)	(2)
Tax on income at different rates	131	114
Tax pertaining to prior years	(102)	(25)
Others (net)	26	40
Total income tax expense	**1,775**	**1,513**

Tata Consultancy Services Limited benefits from the tax holiday available for units set up under the Special Economic Zone Act, 2005. These tax holidays are available for a period of fifteen years from the date of commencement of operations. Under the SEZ scheme, the unit which begins providing services on or after April 1, 2005 will be eligible for deductions of 100% of profits or gains derived from export of services for the first five years, 50% of such profits or gains for a further period of five years and 50% of such profits or gains for the balance period of five years subject to fulfillment of certain conditions. From April 1, 2011, profits from units set up under SEZ scheme are subject to Minimum Alternate Tax (MAT).

Significant components of net deferred tax assets and liabilities for the year ended March 31, 2022 are as follows:

	Opening balance	Recognised in profit or loss	Recognised in / reclassified from other comprehensive income	Adjustments / utilisation	Exchange difference	Closing balance
	(In million of USD)					
Deferred tax assets / (liabilities) in relation to						
Property, plant and equipment and intangible assets	39	18	-	-	(2)	55
Provision for employee benefits	124	13	8	-	(5)	140
Cash flow hedges	1	-	1	-	-	2
Receivables, financial assets at amortised cost	57	6	-	-	(1)	62
MAT credit entitlement	234	-	-	(99)	(5)	130
Branch profit tax	(42)	31	-	-	1	(10)
Undistributed earnings of subsidiaries	(26)	(21)	-	-	1	(46)
Unrealised gain on securities carried at fair value through profit or loss / other comprehensive income	(68)	-	24	-	2	(42)
Lease liabilities	35	(3)	-	-	(1)	31
Others	74	12	-	-	-	86
Total deferred tax assets / (liabilities)	**428**	**56**	**33**	**(99)**	**(10)**	**408**

Gross deferred tax assets and liabilities are as follows:

As at March 31, 2022	Assets	Liabilities	Net
	(In million of USD)		
Deferred tax assets / (liabilities) in relation to			
Property, plant and equipment and intangible assets	68	13	55
Provision for employee benefits	143	3	140
Cash flow hedges	2	-	2
Receivables, financial assets at amortised cost	62	-	62
MAT credit entitlement	130	-	130
Branch profit tax	-	10	(10)
Undistributed earnings of subsidiaries	-	46	(46)
Unrealised gain on securities carried at fair value through profit or loss / other comprehensive income	(42)	-	(42)
Lease liabilities	31	-	31
Others	92	6	86
Total deferred tax assets / (liabilities)	**486**	**78**	**408**

Significant components of net deferred tax assets and liabilities for the year ended March 31, 2021 are as follows:

	Opening balance	Recognised in profit or loss	Recognised in / reclassified from other comprehensive income	Adjustments / utilisation	Exchange difference	Closing balance
	(In million of USD)					
Deferred tax assets / (liabilities) in relation to						
Property, plant and equipment and intangible assets	16	17	-	6	-	39
Provision for employee benefits	88	23	1	11	1	124
Cash flow hedges	3	-	(2)	-	-	1
Receivables, financial assets at amortised cost	50	5	-	-	2	57
MAT credit entitlement	143	5	-	81	5	234
Branch profit tax	(38)	(3)	-	-	(1)	(42)
Undistributed earnings of subsidiaries	(37)	11	-	-	-	(26)
Unrealised gain on securities carried at fair value through profit or loss / other comprehensive income	(64)	-	(1)	-	(3)	(68)
Lease liabilities	45	(11)	-	-	1	35
Others	63	11	-	-	-	74
Total deferred tax assets / (liabilities)	**269**	**58**	**(2)**	**98**	**5**	**428**

Gross deferred tax assets and liabilities are as follows:

As at March 31, 2021	Assets	Liabilities	Net
	(In million of USD)		
Deferred tax assets / (liabilities) in relation to			
Property, plant and equipment and intangible assets	59	20	39
Provision for employee benefits	126	2	124
Cash flow hedges	1	-	1
Receivables, financial assets at amortised cost	57	-	57
MAT credit entitlement	234	-	234
Branch profit tax	-	42	(42)
Undistributed earnings of subsidiaries	-	26	(26)
Unrealised gain on securities carried at fair value through profit or loss / other comprehensive income	(68)	-	(68)
Lease liabilities	35	-	35
Others	88	14	74
Total deferred tax assets / (liabilities)	**532**	**104**	**428**

Under the Income-tax Act, 1961 of India, unabsorbed business losses expire 8 years after the year in which they originate. In respect of certain foreign subsidiaries, business losses can be carried forward indefinitely unless there is a substantial change in the ownership.

Unrecognised deferred tax assets relate primarily to business losses and tax credit entitlements which do not qualify for recognition as per the applicable accounting standards. These unabsorbed business losses will expire based on the year of origination as follows:

March 31,	Unabsorbed business losses
	(In million of USD)
2023	-
2024	1
2025	1
2026	-
2027	-
Thereafter	15
Total	**17**

Under the Income-tax Act, 1961 of India, Tata Consultancy Services Limited is liable to pay Minimum Alternate Tax in the tax holiday period. MAT paid can be carried forward for a period of 15 years and can be set off against the future tax liabilities. MAT is recognised as a deferred tax asset only when the asset can be measured reliably and it is probable that the future economic benefit associated with the asset will be realised.

Deferred tax liability on temporary differences of $816 million as at March 31, 2022 associated with investments in subsidiaries has not been recognised as it is the intention of Tata Consultancy Services Limited to reinvest the earnings of these subsidiaries for the foreseeable future.

Direct tax contingencies

The Company and its subsidiaries have ongoing disputes with income tax authorities in India and in some of the other jurisdictions where they operate. The disputes relate to tax treatment of certain expenses claimed as deduction, computation or eligibility of tax incentives and allowances and characterisation of fees for services received. The Company and its subsidiaries have recognised contingent liability in respect of tax demands received from direct tax authorities in India and other jurisdictions of $218 million and $130 million as at March 31, 2022 and 2021, respectively. These demand orders are being contested by the Company and its subsidiaries based on the management evaluation and advise of tax consultants. In respect of tax contingencies of $42 million and $43 million as at March 31, 2022 and 2021, respectively, not included above, the Company is entitled to an indemnification from the seller of TCS e-Serve Limited.

The Group periodically receives notices and inquiries from income tax authorities related to the Group's operations in the jurisdictions it operates in. The Group has evaluated these notices and inquiries and has concluded that any consequent income tax claims or demands by the income tax authorities will not succeed on ultimate resolution.

The number of years that are subject to tax assessments varies depending on tax jurisdiction. The major tax jurisdictions of Tata Consultancy Services Limited include India, United States of America and United Kingdom. In India, tax filings from fiscal 2018 are generally subject to examination by the tax authorities. In United States of America, the federal statute of limitation applies to fiscals 2017 and earlier and applicable state statutes of limitation vary by state. In United Kingdom, the statute of limitation generally applies to fiscal 2018 and earlier.

16) Employee benefits

Defined benefit plans

For defined benefit plans, the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the date of each statement of financial position. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is reflected immediately in the statement of financial position with a charge or credit recognised in other comprehensive income in the period in which they occur. Past service cost, both vested and unvested, is recognised as an expense at the earlier of (a) when the plan amendment or curtailment occurs; and (b) when the entity recognises related restructuring costs or termination benefits.

The retirement benefit obligations recognised in the statement of financial position represents the present value of the defined benefit obligations reduced by the fair value of scheme assets. Any asset resulting from this calculation is limited to the present value of available refunds and reductions in future contributions to the scheme.

The Group provides benefits such as gratuity, pension and provident fund (Company managed fund) to its employees which are treated as defined benefit plans.

Defined contribution plans

Contributions to defined contribution plans are recognised as expense when employees have rendered services entitling them to such benefits.

The Group provides benefits such as superannuation, provident fund (other than Company managed fund) and foreign defined contribution plans to its employees which are treated as defined contribution plans.

Short-term employee benefits

All employee benefits payable wholly within twelve months of rendering the service are classified as short-term employee benefits. Benefits such as salaries, wages etc. and the expected cost of ex-gratia are recognised in the period in which the employee renders the related service. A liability is recognised for the amount expected to be paid when there is a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Compensated absences

Compensated absences which are expected to occur within twelve months after the end of the period in which the employee renders the related services are recognised as undiscounted liability at the date of statement of financial position. Compensated absences which are not expected to occur within twelve months after the end of the period in which the employee renders the related services are recognised as an actuarially determined liability at the present value of the defined benefit obligation at the date of statement of financial position.

Function wise employee cost consists of the following:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Cost of revenue	11,280	9,714
Selling, general and administrative expenses	3,139	2,683
Total	**14,419**	**12,397**

Employee cost consist of the following:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Salaries, incentives and allowances	12,906	11,213
Contributions to provident and other funds	1,133	864
Staff welfare expenses	380	320
Total	**14,419**	**12,397**

Employee benefit obligations consist of the following:

Employee benefit obligations – Current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Compensated absences	497	469
Other employee benefit obligations	6	7
Total	**503**	**476**

Employee benefit obligations – Non-current

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Gratuity liability	2	1
Foreign defined benefit plans	65	68
Other employee benefit obligations	22	33
Total	**89**	**102**

Employee benefits plans consist of the following:

Gratuity and pension

In accordance with Indian law, Tata Consultancy Services Limited and its subsidiaries in India operate a scheme of gratuity which is a defined benefit plan. The gratuity plan provides for a lump sum payment to vested employees at retirement, death while in employment or on termination of employment of an amount equivalent to 15 to 30 days' salary payable for each completed year of service. Vesting occurs upon completion of five continuous years of service. The Company manages the plan through a trust. Trustees administer contributions made to the trust. Certain overseas subsidiaries of the Company also provide for retirement benefit pension plans in accordance with the local laws.

The following table sets out the details of the defined benefit retirement plans and the amounts recognised in the financial statements:

	Year ended March 31, 2022					Year ended March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)									
Change in benefit obligations										
Benefit obligations, beginning of the year	**587**	**1**	**313**	**33**	**934**	**482**	**1**	**99**	**22**	**604**
Translation exchange difference	(18)	-	(12)	-	(30)	14	-	-	1	15
Plan assumed on insourcing of employees	-	-	-	-	-	-	-	184	3	187
Plan participants' contribution	-	-	2	-	2	-	-	2	-	2
Service cost	72	-	7	6	85	62	-	4	5	71
Interest cost	40	-	3	-	43	33	-	2	-	35
Remeasurement of the net defined benefit liability	(25)	-	(5)	(1)	(31)	18	-	19	3	40
Benefits paid	(66)	-	(5)	(2)	(73)	(22)	-	3	(1)	(20)
Shift of plan from unfunded to funded position	1	(1)	-	-	-	-	-	-	-	-
Benefit obligations, end of the year	**591**	**-**	**303**	**36**	**930**	**587**	**1**	**313**	**33**	**934**

	Year ended March 31, 2022					Year ended March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)									
Change in plan assets										
Fair value of plan assets, beginning of the year	**640**	**-**	**283**	**-**	**923**	**482**	**-**	**83**	**-**	**565**
Translation exchange difference	(20)	-	(11)	-	(31)	15	-	-	-	15
Plan assumed on insourcing of employees	-	-	-	-	-	-	-	178	-	178
Interest income	45	-	2	-	47	36	-	1	-	37
Employers' contributions	131	-	6	-	137	113	-	3	-	116
Plan participants' contribution	-	-	2	-	2	-	-	2	-	2
Benefits paid	(66)	-	(5)	-	(71)	(22)	-	3	-	(19)
Remeasurement - return on plan assets excluding amount included in interest income	(1)	-	5	-	4	16	-	13	-	29
Fair value of plan assets, end of the year	**729**	**-**	**282**	**-**	**1,011**	**640**	**-**	**283**	**-**	**923**

	As at March 31, 2022					As at March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)									
Funded status										
Deficit of plan assets over obligations	(2)	-	(29)	(36)	(67)	-	(1)	(35)	(33)	(69)
Surplus of plan assets over obligations	140	-	8	-	148	53	-	5	-	58
	138	**-**	**(21)**	**(36)**	**81**	**53**	**(1)**	**(30)**	**(33)**	**(11)**

	As at March 31, 2022					As at March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)									
Category of assets										
Corporate bonds	224	-	49	-	273	192	-	110	-	302
Equity instruments	9	-	72	-	81	4	-	-	-	4
Government bonds and securities	346	-	26	-	372	307	-	-	-	307
Insurer managed funds	130	-	66	-	196	124	-	59	-	183
Bank balances	1	-	3	-	4	-	-	-	-	-
Others	19	-	66	-	85	13	-	114	-	127
Total	**729**	**-**	**282**	**-**	**1,011**	**640**	**-**	**283**	**-**	**923**

Net periodic gratuity / pension cost, included in employee cost consists of the following components:

	Year ended March 31, 2022					Year ended March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)									
Service cost	72	-	7	6	85	62	-	4	5	71
Net interest on net defined benefit (asset) / liability	(5)	-	1	-	(4)	(3)	-	1	-	(2)
Net periodic gratuity / pension cost	**67**	**-**	**8**	**6**	**81**	**59**	**-**	**5**	**5**	**69**
Actual return on plan assets	**44**	**-**	**7**	**-**	**51**	**52**	**-**	**14**	**-**	**66**

Remeasurement of the net defined benefit (asset) / liability:

	Year ended March 31, 2022				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)				
Actuarial (gains) and losses arising from changes in demographic assumptions	(3)	-	(2)	-	(5)
Actuarial (gains) and losses arising from changes in financial assumptions	(22)	-	(8)	(3)	(33)
Actuarial (gains) and losses arising from changes in experience adjustments	-	-	5	2	7
Remeasurement of the net defined benefit liability	**(25)**	**-**	**(5)**	**(1)**	**(31)**
Remeasurement - return on plan assets excluding amount included in interest income	1	-	(5)	-	(4)
Total	**(24)**	**-**	**(10)**	**(1)**	**(35)**

	Year ended March 31, 2021				
	Domestic plans Funded	Domestic plans Unfunded	Foreign plans Funded	Foreign plans Unfunded	Total
	(In million of USD)				
Actuarial (gains) and losses arising from changes in demographic assumptions	3	-	-	-	3
Actuarial (gains) and losses arising from changes in financial assumptions	(4)	-	16	3	15
Actuarial (gains) and losses arising from changes in experience adjustments	19	-	3	-	22
Remeasurement of the net defined benefit liability	**18**	**-**	**19**	**3**	**40**
Remeasurement - return on plan assets excluding amount included in interest income	(16)	-	(13)	-	(29)
Total	**2**	**-**	**6**	**3**	**11**

The assumptions used in accounting for the defined benefit plan are set out below:

	Year ended March 31, 2022		Year ended March 31, 2021	
	Domestic plans	Foreign plans	Domestic plans	Foreign plans
Discount rate	4.50% - 7.25%	0.77%-8.30%	4.25%-7.00%	0.40%-7.55%
Rate of increase in compensation levels of covered employees	4.00% - 6.00%	1.50%-7.00%	4.00%-6.00%	1.25%-7.00%
Rate of return on plan assets	4.50% - 7.25%	0.77%-8.30%	4.25%-7.00%	0.40%-7.55%
Weighted average duration of defined benefit obligations	2-16 years	3-31 years	3-18 years	3-65 years

Future mortality assumptions are taken based on the published statistics by the Insurance Regulatory and Development Authority of India.

The expected benefits are based on the same assumptions as are used to measure the Group's defined benefit plan obligations as at March 31, 2022.The Group is expected to contribute $8 million to defined benefit plan obligations funds for the year ending March 31, 2022 comprising domestic component of $1 million and foreign component of $7 million.

The significant actuarial assumptions for the determination of the defined benefit obligations are discount rate and expected salary increase. The sensitivity analysis below have been determined based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

If the discount rate increases / decreases by 0.50%, the defined benefit obligations would increase / (decrease) as follows:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Increase of 0.50%	(49)	(51)
Decrease of 0.50%	56	57

If the expected salary growth increases / decreases by 0.50%, the defined benefit obligations would increase / (decrease) as follows:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Increase of 0.50%	26	38
Decrease of 0.50%	(25)	(35)

The sensitivity analysis presented above may not be representative of the actual change in the defined benefit obligations as it is unlikely that the change in assumptions would occur in isolation of one another as some of the assumptions may be correlated.

Furthermore, in presenting the above sensitivity analysis, the present value of the defined benefit obligations has been calculated using the Projected Unit Credit Method at the end of the reporting period, which is the same as that applied in calculating the defined benefit obligation liability recognised in the statement of financial position.

Each year an Asset - Liability matching study is performed in which the consequences of the strategic investment policies are analysed in terms of risk and return profiles. Investment and contribution policies are integrated within this study.

Year ending March 31,	Defined benefit obligations
	(In million of USD)
2023	70
2024	59
2025	63
2026	61
2027	63
2028-2032	327

Provident fund

In accordance with Indian law, all eligible employees of Tata Consultancy Services Limited in India are entitled to receive benefits under the provident fund plan in which both the employee and employer (at a determined rate) contribute monthly to a trust set up by the Company to manage the investments and distribute the amounts entitled to employees. This plan is a defined benefit plan as the Company is obligated to provide its members a rate of return which should, at the minimum, meet the interest rate declared by Government administered provident fund. A part of the Company's

contribution is transferred to Government administered pension fund. The contributions made by the Company and the shortfall of interest, if any, are recognised as an expense in profit or loss under employee cost. In accordance with an actuarial valuation of provident fund liabilities on the basis of guidance issued by Actuarial Society of India and based on the assumptions as mentioned below, there is no deficiency in the interest cost as the present value of the expected future earnings of the fund is greater than the expected amount to be credited to the individual members based on the expected guaranteed rate of interest of Government administered provident fund.

All eligible employees of Indian subsidiaries of the Company are entitled to receive benefits under the provident fund plan in which both the employee and employer (at a determined rate) contribute monthly to the Government administered provident fund plan. A part of the company's contribution is transferred to Government administered pension fund. This plan is a defined contribution plan as the obligation of the employer is limited to the monthly contributions made to the fund. The contributions made to the fund are recognised as an expense in profit or loss under employee cost.

The details of fund and plan assets are given below:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Fair value of plan assets	3,014	2,725
Present value of defined benefit obligations	(3,014)	(2,725)
Net excess / (shortfall)	-	-

The plan assets have been primarily invested in Government securities and corporate bonds.

The principal assumptions used in determining the present value obligations of interest guarantee under the deterministic approach are as follows

	As at March 31, 2022	As at March 31, 2021
Discount rate	7.00%	6.50%
Average remaining tenure of investment portfolio	8 years	8 years
Guaranteed rate of return	8.10%	8.50%

The Group expensed $185 million and $146 million for the years ended March 31, 2022 and 2021, respectively towards provident fund.

Superannuation

All eligible employees on Indian payroll are entitled to benefits under Superannuation, a defined contribution plan. The Group makes monthly contributions until retirement or resignation of the employee. The Group recognises such contributions as an expense when incurred. The Group has no further obligation beyond its monthly contribution.

The Group expensed $51 million and $49 million for the years ended March 31, 2022 and 2021, respectively, towards Employees' Superannuation Fund.

Foreign defined contribution plans

The Group expensed $241 million and $197 million for the years ended March 31, 2022 and 2021, respectively, towards foreign defined contribution plans.

17) Earnings per share

Basic earnings per share is computed by dividing profit or loss attributable to equity shareholders of the Company by the weighted average number of equity shares outstanding during the period. The Company did not have any potentially dilutive securities in any of the years presented.

	Year ended March 31, 2022	Year ended March 31, 2021
Profit for the year attributable to Shareholders of the Company (In million of USD)	5,139	4,384
Weighted average number of equity shares	3,698,832,195	3,740,110,733
Basic and diluted earnings per share in USD	1.39	1.17
Face value per equity share in ₹	1	1

18) Segment information

Operating segments are defined as components of an enterprise for which discrete financial information is available that is evaluated regularly by the chief operating decision maker, in deciding how to allocate resources and assessing performance. The Group's chief operating decision maker is the Chief Executive Officer and Managing Director.

The Group has identified business segments ('industry vertical') as reportable segments. The business segments comprise:1) Banking, Financial Services and Insurance, 2) Manufacturing, 3) Retail and Consumer Business, 4) Communication, Media and Technology, 5) Life Sciences and Healthcare and 6) Others such as Energy, Resources and Utilities, s-Governance and Products.

Revenue and expenses directly attributable to segments are reported under each reportable segment. Expenses which are not directly identifiable to each reporting segment have been allocated on the basis of associated revenue of the segment or manpower efforts. All other expenses which are not attributable or allocable to segments have been disclosed as unallocable expenses.

The assets and liabilities of the Group are used interchangeably amongst segments. Allocation of such assets and liabilities is not practicable and any forced allocation would not result in any meaningful segregation. Hence assets and liabilities have not been identified to any of the reportable segments.

Summarised segment information for the years ended March 31, 2022 and 2021 is as follows:

Year ended March 31, 2022

	Banking, Financial Services and Insurance	Manufacturing	Retail and Consumer Business	Communication, Media and Technology	Life Sciences and Healthcare	Others	Total
	(In million of USD)						
Revenue	**10,072**	**2,494**	**4,118**	**4,273**	**2,744**	**2,006**	**25,707**
Segment result	**2,703**	**750**	**1,145**	**1,276**	**824**	**415**	**7,113**
Depreciation and amortisation expense							617
Total unallocable expenses							**617**
Operating profit							**6,496**
Other income (net)							434
Profit before taxes							**6,930**
Income tax expense							1,775
Profit for the year							**5,155**
Significant non-cash items (allocable)	2	-	1	-	-	15	18
Significant non-cash items (unallocable)							-

	Year ended March 31, 2022						
	Banking, Financial Services and Insurance	Manufacturing	Retail and Consumer Business	Communication, Media and Technology	Life Sciences and Healthcare	Others	Total
	(In million of USD)						
Revenue	**8,864**	**2,154**	**3,456**	**3,656**	**2,291**	**1,753**	**22,174**
Segment result	**2,522**	**607**	**968**	**1,082**	**709**	**402**	**6,290**
Depreciation and amortisation expense							549
Provision towards legal claim (Refer note 19)							165
Total unallocable expenses							**714**
Operating profit							**5,576**
Other income (net)							338
Profit before taxes							**5,914**
Income tax expense							1,513
Profit for the year							**4,401**
Significant non-cash items (allocable)	2	-	10	1	-	14	27
Significant non-cash items (unallocable)							-

Geographical revenue is allocated based on the location of the customers.

Information regarding geographical revenue is as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Americas		
North America	12,983	11,014
Latin America	430	365
Europe		
United Kingdom	4,076	3,466
Continental Europe	4,123	3,605
Asia Pacific	2,270	2,138
India	1,315	1,142
Middle East and Africa	510	444
Total	**25,707**	**22,174**

Geographical non-current assets (property, plant and equipment, right-of-use assets, goodwill, other intangible assets, income tax assets and other non-current assets) are allocated based on the location of assets.

Information regarding geographical non-current assets is as follows

Geography	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Americas		
North America	369	379
Latin America	113	115
Europe		
United Kingdom	182	198
Continental Europe	297	348
Asia Pacific	112	135
India	2,643	2,513
Middle East and Africa	67	65
Total	**3,783**	**3,753**

Information about major customers

No single customer represents 10% or more of the Group's total revenue for the years ended March 31, 2022 and 2021.

19) Commitments and contingencies

Capital commitments

The Group has contractually committed (net of advances) $190 million and $146 million as at March 31, 2022 and 2021, respectively, for purchase of property, plant and equipment.

Contingencies

- **Direct tax matters**

  Refer note 15.

- **Indirect tax matters**

  The Company and its subsidiaries have ongoing disputes with tax authorities mainly relating to treatment of characterisation and classification of certain items. The Company and its subsidiaries have demands amounting to $75 million and $76 million as at March 31, 2022 and 2021, respectively, from various indirect tax authorities which are being contested by the Company and its subsidiaries based on the management evaluation and advice of tax consultants.

- **Other claims**

  Claims aggregating $39 million and $27 million as at March 31, 2022 and 2021, respectively, against the Group have not been acknowledged as debts.

  In addition to above, in October 2014, Epic Systems Corporation (referred to as Epic) filed a legal claim against the Company in the Court of Western District Madison, Wisconsin alleging unauthorised access to and download of their confidential information and use thereof in the development of the Company's product MedMantra. In April 2016, the Company received an unfavourable jury verdict awarding damages of $940 million to Epic which was thereafter reduced by the Trial Court to $420 million. Pursuant to reaffirmation of the District Court order in March 2019, the Company filed an appeal in the Appeals Court to fully set aside the Order. Epic also filed a cross appeal challenging the reduction by the District Court judge of $100 million award and $200 million in punitive damages. On August 20, 2020, the Appeals Court vacated the award of $280 million in punitive damages considering the award to be constitutionally excessive and remanded the case back to District Court with instructions to reassess and reduce the punitive damages award to at most $140 million, affirmed the

District Court's decision vacating the jury's award of $100 million in compensatory damages for alleged use of "other confidential information" by the Company, and affirmed the District Court's decision upholding the jury's award of $140 million in compensatory damages for use of the comparative analysis by the Company. The proceedings for assessing punitive damages have been remanded back to the District Court. Both the Company and Epic have filed their briefs at the District Court in relation to punitive damages. The matter is under consideration by the District Court. On April 8, 2021, Epic approached the Supreme Court seeking review of the order of the Appeals Court vacating the award of $280 million towards punitive damages and remanding back to District Court with an instruction to reassess the punitive damages, to no more than $140 million. On March 21, 2022, Supreme court denied Epic's petition seeking review of the order. The Company will continue to pursue all legal options available in the matter. Considering all the facts and various legal precedence, on a conservative and prudent basis, the Company provided $165 million towards this legal claim in its statement of profit or loss for three month period ended September 30, 2020. This was included in the operating expenses as provision towards legal claim.

Pursuant to US Court procedures, a Letter of Credit has been made available to Epic for $440 million as financial security in order to stay execution of the judgement pending post-appeal proceedings and conclusion.

- **Letter of comfort**

  The Company has given letter of comfort to banks for credit facilities availed by its subsidiaries. As per the terms of letter of comfort, the Company undertakes not to divest its ownership interest directly or indirectly in the subsidiary and provide such managerial, technical and financial assistance to ensure continued successful operations of the subsidiary.

  The amounts assessed as contingent liability do not include interest that could be claimed by counter parties.

20) List of direct and indirect subsidiaries, country of incorporation and percentage of voting power

Name of the Company	Country of incorporation	% of voting power as at March 31, 2022	% of voting power as at March 31, 2021
Subsidiaries (held directly)			
APTOnline Limited	India	89.00	89.00
C-Edge Technologies Limited	India	51.00	51.00
Diligenta Limited	UK	100.00	100.00
MP Online Limited	India	89.00	89.00
Tata Consultancy Services Canada Inc.	Canada	100.00	100.00
Tata America International Corporation	USA	100.00	100.00
Tata Consultancy Services Asia Pacific Pte Ltd.	Singapore	100.00	100.00
Tata Consultancy Services Belgium	Belgium	100.00	100.00

Name of the Company	Country of incorporation	% of voting power as at March 31, 2022	% of voting power as at March 31, 2021
Tata Consultancy Services Deutschland GmbH	Germany	100.00	100.00
Tata Consultancy Services Netherlands BV	Netherlands	100.00	100.00
Tata Consultancy Services Sverige AB	Sweden	100.00	100.00
TCS FNS Pty Limited	Australia	100.00	100.00
TCS Iberoamerica SA	Uruguay	100.00	100.00
Tata Consultancy Services (Africa) (PTY) Ltd.	South Africa	100.00	100.00
MahaOnline Limited	India	74.00	74.00
Tata Consultancy Services Qatar L.L.C.	Qatar	100.00	100.00
TCS e-Serve International Limited	India	100.00	100.00
TCS Foundation	India	100.00	100.00
Tata Consultancy Services UK Limited	UK	100.00	100.00
Tata Consultancy Services Ireland Limited	Ireland	100.00	100.00
Subsidiaries (held indirectly)			
TCS Financial Solutions Beijing Co., Ltd.	China	100.00	100.00

Name of the Company	Country of incorporation	% of voting power as at March 31, 2022	% of voting power as at March 31, 2021
Tata Consultancy Services (China) Co., Ltd.	China	93.20	93.20
TCS Solution Center S.A.	Uruguay	100.00	100.00
Tata Consultancy Services Argentina S.A.	Argentina	100.00	100.00
Tata Consultancy Services Do Brasil Ltda	Brazil	100.00	100.00
Tata Consultancy Services De Mexico S.A., De C.V.	Mexico	100.00	100.00
Tata Consultancy Services De Espana S.A.	Spain	100.00	100.00
Tata Consultancy Services Italia s.r.l.	Italy	100.00	100.00
Tata Consultancy Services Japan, Ltd.	Japan	66.00	66.00
Tata Consultancy Services Malaysia Sdn Bhd	Malaysia	100.00	100.00
Tata Consultancy Services Luxembourg S.A.	Capellen (G.D. de Luxembourg)	100.00	100.00
Tata Consultancy Services (Portugal) Unipessoal, Limitada	Portugal	100.00	100.00
TCS Inversiones Chile Limitada	Chile	100.00	100.00

Name of the Company	Country of incorporation	% of voting power as at March 31, 2022	% of voting power as at March 31, 2021
Tata Consultancy Services Chile S.A.	Chile	100.00	100.00
TATASOLUTION CENTER S.A.	Ecuador	100.00	100.00
TCS Financial Solutions Australia Pty Limited	Australia	100.00	100.00
PT Tata Consultancy Services Indonesia	Indonesia	100.00	100.00
Tata Consultancy Services Switzerland Ltd.	Switzerland	100.00	100.00
Tata Consultancy Services (South Africa) (PTY) Ltd.	South Africa	100.00	100.00
Tata Consultancy Services (Thailand) Limited	Thailand	100.00	100.00
Tata Consultancy Services (Philippines) Inc.	Philippines	100.00	100.00
TCS e-Serve America, Inc.	USA	-	100.00
TCS Uruguay S.A.	Uruguay	100.00	100.00
MGDC S.C.	Mexico	100.00	100.00
Tata Consultancy Services Osterreich GmbH	Austria	100.00	100.00
Tata Consultancy Services Danmark ApS	Denmark	100.00	100.00
Tata Consultancy Services France	France	100.00	100.00

Name of the Company	Country of incorporation	% of voting power as at March 31, 2022	% of voting power as at March 31, 2021
Tata Consultancy Services Saudi Arabia	Saudi Arabia	100.00	76.00
TCS Business Services GmbH	Germany	100.00	100.00
TCS Technology Solutions AG	Germany	100.00	100.00
Saudi Desert Rose Holding B.V.	Netherlands	100.00	-
Tata Consultancy Services Bulgaria EOOD	Bulgaria	100.00	-
Tata Consultancy Services Guatemala, S.A.	Gautemala	100.00	-

Notes:

1. Tata Consultancy Services Qatar S.S.C. renamed as Tata Consultancy Services Qatar L.L.C..
2. W12 Studios Limited renamed as Tata Consultancy Services UK Limited.
3. Equity stake increased to 100% in Tata Consultancy Services Saudi Arabia on acquisition of Saudi Desert Rose Holding B.V. w.e.f. May 26, 2021.
4. Tata Consultancy Services Ireland Limited incorporated a wholly owned subsidiary, Tata Consultancy Services Bulgaria EOOD in Bulgaria on August 31, 2021.
5. TCS Iberoamerica SA incorporated a subsidiary, Tata Consultancy Services Guatemala, S.A. in Guatemala on September 1, 2021.
6. Postbank Systems AG renamed as TCS Technology Solutions AG.
7. TCS e-Serve America, Inc. liquidated w.e.f. December 29, 2021.

21) Related party transactions

The Company's principal related parties consist of its holding company Tata Sons Private Limited and its subsidiaries, its own subsidiaries, affiliates and key managerial personnel. The Group's material related party transactions and outstanding balances are with related parties with whom the Group routinely enter into transactions in the ordinary course of business. Refer note 20 for list of subsidiaries of the Company.

Transactions and balances with its own subsidiaries are eliminated on consolidation.

	Year ended March 31, 2022				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Revenue	5	106	374	-	485
Facility expenses	-	3	6	-	9
Lease rental	-	10	3	-	13
Brand equity contribution	27	-	-	-	27
Contribution and advance to post employment benefit plans	-	-	-	310	310
Purchases of goods and services (including reimbursements)	-	76	21	-	97
Purchase of property, plant and equipment	-	2	20	-	22
Loans and advances given	-	-	1	-	1
Loans and advances recovered	-	-	2	-	2
Dividend paid	1,292	1	-	-	1,293
Buy-back of shares	1,478	1	1	-	1,480

	Year ended March 31, 2021				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Revenue	4	82	297	-	383
Facility expenses	-	3	5	-	8
Lease rental	-	4	5	-	9
Bad debts and advances written off, allowance for doubtful trade receivables and advances (net)	-	1	-	-	1
Brand equity contribution	24	-	-	-	24
Contribution and advance to post employment benefit plans	-	-	-	798	798
Purchases of goods and services (including reimbursements)	-	65	47	-	112
Purchase of property, plant and equipment	-	-	12	-	12
Loans and advances given	-	-	1	-	1
Loans and advances recovered	-	-	1	-	1
Dividend paid	1,056	-	-	-	1,056
Buy-back of shares	1,370	1	-	-	1,371

Balances receivable from related parties are as follows:

	As at March 31, 2022				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Trade receivables and contract assets	1	32	123	-	156
Other financial assets and other assets	1	7	4	-	12
Total	**2**	**39**	**127**	**-**	**168**

	As at March 31, 2021				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Trade receivables and contract assets	1	36	98	-	135
Other financial assets and other assets	1	4	8	-	13
Total	**2**	**40**	**106**	**-**	**148**

Balances payable to related parties are as follows:

	As at March 31, 2022				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Trade payables, unearned and deferred revenue, other financial liabilities and other liabilities	25	67	20	-	112
Total	**25**	**67**	**20**	**-**	**112**
Commitments	-	5	26	-	31

	As at March 31, 2021				
	Tata Sons Limited	Subsidiaries of Tata Sons Limited	Associates / joint ventures of Tata Sons Limited and their subsidiaries	Other related parties	Total
	(In million of USD)				
Trade payables, unearned and deferred revenue, other financial liabilities and other liabilities	23	41	53	-	117
Total	**23**	**41**	**53**	**-**	**117**
Commitments	-	1	37	-	38

Material related party transactions are as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Revenue		
Jaguar Land Rover Limited	201	147
Tata Steel IJmuiden BV	75	61

Material related party balances are as follows:

	As at March 31, 2022	As at March 31, 2021
	(In million of USD)	
Trade receivables and contract assets		
Jaguar Land Rover Limited	50	40

Transactions with key management personnel are as follows:

	Year ended March 31, 2022	Year ended March 31, 2021
	(In million of USD)	
Short-term benefits	7	6
Dividend paid during the year	-*	-*
Total	**7**	**6**

* Amount less than $1 million.

The remuneration of directors and key executives is determined by the remuneration committee having regard to the performance of individuals and market trends.

The above figures do not include provisions for encashable leave, gratuity and premium paid for group health insurance, as separate actuarial valuation / premium paid are not available.

22) The Indian Parliament has approved the Code on Social Security, 2020 which would impact the contributions by the company towards Provident Fund and Gratuity. The Ministry of Labour and Employment had released draft rules for the Code on Social Security, 2020 on November 13, 2020, and invited suggestions from stakeholders which are under consideration by the Ministry. The Company and its Indian subsidiaries will assess the impact and its evaluation once the subject rules are notified. The Company and its Indian subsidiaries will give appropriate impact in its financial statements in the period in which, the Code becomes effective and the related rules to determine the financial impact are published.

23) Dividends

Dividends paid during the year ended March 31, 2022 include an amount of $0.20 (₹15.00) per equity share towards final dividend for the year ended March 31, 2021 and an amount of $0.27 (₹21.00) per equity share towards interim dividends for the year ended March 31, 2022. Dividends paid during the year ended March 31, 2021 include an amount of $0.08 (₹6.00) per equity share towards final dividend for the year ended March 31, 2020 and an amount of $0.31 (₹23.00) per equity share towards interim dividends (including special dividend) for the year ended March 31, 2021.

Dividends declared by the Company are based on profits available for distribution. On April 11, 2022, the Board of Directors of the Company have proposed a final dividend of ₹22.00 (USD equivalent $0.29) per share in respect of the year ended March 31, 2022 subject to the approval of shareholders at the Annual General Meeting, and if approved, would result in a cash outflow of approximately $1,063 million.

Glossary

5G	Fifth generation wireless technology for digital cellular networks. 5G is expected to be much faster and enable much higher volumes of data sharing than earlier generations of cellular networks. Its massive capacity and ultra-low latency are expected to usher in an era of hyper-connectivity, enabling newer use cases such as autonomous cars, and accelerating the adoption of IoT.
ADM	See Application Development and Maintenance
Agile	A collaborative approach for IT and business teams to develop software incrementally and faster. TCS has pioneered the Location Independent Agile™ model that allows for deployment at scale, and helps globally distributed organization execute large transformational programs quickly, while ensuring stability and quality.
AgilityDebt™	AgilityDebt™ is an index developed by TCS, which uniquely indicates the burden carried by an organization that restricts its Agility. The index is arrived at based on a holistic Agile maturity assessment framework that measures the gap against required Agile talent, roles, team composition, delivery practices, Agile culture, Agile technology and DevOps enablers. TCS uses AgilityDebt™ to assess where the customer's teams are in the Agile journey, find the bottlenecks, and accelerate their Agile transformations.
Agile Workspaces	These are key enablers of TCS' Location Independent Agile model, and represent the next generation work environment that facilitate greater collaboration among teams. It is characterized by partition-less open offices, informal seating, interactive surfaces for information capture, and modern collaboration devices for increased productivity.
AI	See Artificial Intelligence
Algo Retail™	TCS' proprietary approach and suite of intellectual property that enables retailers to seamlessly integrate and orchestrate data flows across the retail value chain, harnessing the power of analytics, AI and machine learning in the areas of personalization, pricing optimization, marketing, online search and commerce to unlock exponential business value.
Amortization	An accounting concept similar to depreciation, but used to measure the consumption of intangible assets.
Analytics	In the enterprise context, this is the discovery, interpretation, and communication of meaningful patterns in business data to predict and improve business performance.
Annuity Contracts	A long-term contract which can guarantee regular payments.
APAC	Acronym for Asia Pacific
API	See Application Programming Interface

APIfication	The process of exposing a discrete business function or data within an enterprise's systems through APIs.
Application Development and Maintenance	Design, development, and deployment of custom software; ongoing support, upkeep, and enhancement of such software over its lifetime.
Application Programming Interface	A set of easily accessible protocols for communication among various software components.
AR	See Augmented Reality
Artificial Intelligence	Technology that emulates human performance by learning, coming to its own conclusions, understanding complex content, engaging in natural dialogs with people, augmenting human effort or replacing people on execution of non-routine tasks. Also known as Cognitive Computing.
ASEAN	Acronym for Association of Southeast Asian Nations
Assets Under Custody	A measure of the total assets for which a financial institution, typically a custodian bank, provides custodian services.
AUC	See Assets Under Custody
Attrition	Measures what portion of the workforce left the organization (voluntarily and involuntarily) over the last 12 months (LTM). Attrition (LTM) = Total number of departures in the LTM / closing headcount
Augmented Reality	Technology that superimposes a computer-generated image on a user's view of the real world to enrich the interaction.
Automation	The execution of work by machines in accordance with rules that have either been explicitly coded by a human or 'learned' by the machine through pattern recognition of data. Popular types include Robotic Process Automation and Cognitive Automation.
Basis Point	One hundredth of a percentage point, that is, 0.01 percent.
BFSI	Acronym for Banking, Financial Services and Insurance

Big Data	A high volume, high velocity, and/or high variety information asset that require new forms of processing to enable enhanced decision making, insight discovery, and process optimization.
Blockchain	A distributed database that maintains a continuously growing list of records, called blocks, secured from tampering and revision.
Bp	See Basis Point
BPaaS	See Business Process as a Service
BPS	See Business Process Services
Business 4.0	TCS' thought leadership framework that helps enterprises leverage technology to further their growth and transformation agenda. Successful Business 4.0 enterprises use technology to deliver mass personalization, leverage ecosystems, embrace risk and create exponential value. Such enterprises are agile, intelligent, automated and on the cloud.
Business Process as a Service	Refers to the delivery of BPS over a cloud computing model. Whereas traditional BPS relies on labor arbitrage to reduce costs, BPaaS aggregates demand using the cloud, servicing multiple customers with a single instance, multi-tenant platform and shared services, thereby delivering significant operating efficiencies. The pricing model is usually outcome based.
Business Process Services	Designing, enabling, and executing business operations including data management, analytics, interactions and experience management.
Buyback	A corporate action in which a company returns excess cash to shareholders by buying back its shares from them and usually extinguishing those shares thereafter. The company's equity share capital and the number of shares outstanding in the market correspondingly reduces.
CAGR	See Compounded Annual Growth Rate
Capital Expenditure (CapEx)	Funds used by a company to acquire, upgrade, and maintain physical assets such as property, buildings, an industrial plant, technology, or equipment.

Carbon Neutral	This describes the state of an entity whose greenhouse gas emissions to the atmosphere are balanced by activities which absorb an equivalent amount from the atmosphere; often accomplished by the use of carbon offsets.
Carbon Offset	Market-based instrument used to compensate for the emission of greenhouse gases into the atmosphere because of the organization's activity by reducing them somewhere else. Certified Emission Reductions (CERs) and Verified Emission Reductions (VERs) are some of the popular carbon offsets.
Cash and Cash Equivalents	Cash comprises cash on hand and demand / time / fixed deposits. Cash equivalents are short-term, highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value. Cash and cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.
Cash Flow	Inflows and outflows of cash and cash equivalents.
Cash Flow from Operating Activities	Primarily derived from the principal revenue producing activities. Therefore, they generally result from the transactions and other events that enter into the determination of profit or loss.
CBO	See Cognitive Business Operations
CC	See Constant Currency
Chatbots	Computer programs designed to simulate conversation with human users, especially over the internet. They are typically used in dialog systems for various practical purposes like customer service or information acquisition.
Cloud	See Cloud Computing
Cloud Computing	The delivery of easily provisionable computing resources – servers, storage, databases, networking, software, analytics and more – over the internet, consumed on a pay-as-you-go basis.
CMT	Acronym for Communication, Media and Technology

Cognitive Automation	The use of AI and machine learning to automate relatively more complex tasks that require reasoning capability and contextual awareness. TCS' ignio™ a leading cognitive automation software product in the market today.
Cognitive Business Operations (CBO)	An integrated offering where TCS takes responsibility for the outcome of an entire slice of the customers' operations including the business processes and the underlying IT infrastructure, and uses cognitive automation to transform that operational stack.
Cognitive Computing	See Artificial Intelligence
COIN	See Co-Innovation Network
Co-Innovation Network	This is an extended, global innovation ecosystem curated by TCS, to harness the innovation efforts of start-ups and academia, and incorporate them into transformational solutions built by TCS for its customers.
Compounded Annual Growth Rate (CAGR)	The annual growth rate between any two points in time, assuming that it has been compounding during that period.
Connected Clinical Trials (CCT) Platform	Part of the TCS ADD suite, CCT is an innovative software-as-a-service platform that enables life sciences companies to significantly transform patient engagement in clinical trials and improve adherence to protocols, as well as the efficiency and accountability of clinical trials.
Constant Currency	The basis for restating the current period's revenue growth after eliminating the impact of movements in exchange rates during the period.
Contextual Knowledge	This is tacit knowledge pertaining to, and specific to, the granular nuances of a customer's business and IT landscape, acquired on the job over a period of time. TCS teams use their contextual knowledge to design technology solutions that are uniquely tailored for that customer, and therefore, a potential source of competitive differentiation.

CO2e	Acronym for "Carbon dioxide equivalent". It is a standard unit for accounting greenhouse gas (GHG) emissions from carbon dioxide or another greenhouse gases, such as SOX, NOX, methane, etc.
CPG	Acronym for Consumer Packaged Goods
Core Banking System	A back-end system that processes daily banking transactions and posts updates to accounts and other financial records; typically includes deposit, loan and credit processing capabilities, with interfaces to general ledger systems and reporting tools.
Core Transformation	Modernization initiatives that target the one or more elements of the organization's operations stack consisting of business processes, software systems and underlying infrastructure, usually to enable greater agility, scalability, resilience and a superior customer experience. These are typically large in scale and scope, and entail the integrated delivery of multiple capabilities.
Cyber Security	Technologies, processes and practices designed to protect networks, computers, programs and data from attack, damage or unauthorized access.
Days' Sales Outstanding (DSO)	A popular way of depicting the Trade Receivables - billed relative to the company's Revenue. DSO = Trade Receivables - billed * 365 / LTM Revenue
Depreciation	A method of allocating the cost of a tangible long-term asset over its useful life. It is a non-cash accounting entry found in the statement of profit and loss.
DevOps	Represents a new way of working to rapidly deploy new releases of a software in production using high levels of automation and tooling. TCS recommends adoption of DevOps, along with Agile for speed to market.
Digital	Represents new age technologies such as Social Media, Mobility, Analytics, Big Data, Cloud, Artificial Intelligence and Internet of Things. Increasingly, with these technologies becoming mainstream, this word is becoming redundant.

Digital Twin	A digital replica of a physical entity. For instance, a digital twin of a factory is a virtual model of the factory built using its data, process, people information. Impact of any change in a process in the real factory can be studied by simulating the change in the digital twin.
Discretionary Spend	Also known as Change the Business (CTB) spend, it is that portion of the IT budget which is used to fund projects that are not, strictly speaking, essential for day to day operations, but are more transformational in nature. In uncertain economic times, when businesses are forced to cut spends in response to decline in income, discretionary spend is often the first to be scrutinized. However, what is considered discretionary is subjective and may differ considerably amongst businesses even within the same sector.
Distributed Ledger Technology	See Blockchain
Dividend	One form of distribution of profits earned by the Company and is usually declared as an amount per equity share held by the Shareholders. TCS has a policy of declaring quarterly interim dividends and the final dividend is approved by the shareholders in the Annual General Meeting.
DLT	See Distributed Ledger Technology
EACs	Energy Attribute Certificates (EACs) are market-based instruments that can be used by the bearer to claim renewable energy consumption. Each EAC is equivalent to 1 MWh of electricity.
Earnings Per Share	The amount of that period's Net Income attributable to a single share after deducting any preference dividend and related taxes. EPS = [Net profit attributable to Shareholders of the Company – Preference dividend, if any] / Weighted average number of equity shares outstanding during the period

Edge Computing	Computing and storage that is located on servers on the edge of the network, in close proximity to the users, but not through an on-premise data center; usually reserved for low latency use cases.
Effective Tax Rate	The proportion of the Profit Before Tax that is provided towards income taxes. ETR = Tax expense / Profit Before Tax
EIA	Acronym for Environmental Impact Assessment. The study needs to be conducted as per Ministry of Environment and Forest (MoEF) requirements for new construction/ expansion projects.
Engineering and Industrial Services	Consists of next generation product engineering, manufacturing operations transformation, services transformation, embedded software and Internet of Things.
Enterprise Agile	The adoption of Agile methods across all the business functions of the enterprise, designed to empower employees, foster collaboration and drive a culture of continuous innovation at scale.
EPS	See Earnings Per Share
ETR	See Effective Tax rate
Fair Value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
Fintech	Businesses that use technology to make financial services more efficient. Some fintech developments have improved traditional services, for example mobile banking apps, while others have revolutionized services such as pay per mile car insurance, or created new products, such as Bitcoin.
Fixed Price Contracts	A form of services contracts where the vendor takes a turnkey responsibility for delivering a solution for a certain price and within a mutually agreed timeframe. The customer is billed on completion of key project milestones and related deliverables. This arrangement gives the vendor considerable flexibility in the staffing and execution of the project. On the other hand, it also means bearing the project risk.

Forward Contract	A hedging instrument wherein two parties agree to buy or sell a particular asset (such as stock or currency) at a pre-determined rate (or Forward rate) on a specific future date. For e.g. TCS enters into a forward contract to sell USD 1 million after 3 months @ ₹72. Irrespective of the prevailing USD-INR spot rate, TCS will be obliged to sell USD 1 million @ ₹72 at the end of 3 months.
Framework	A kind of intellectual property, consisting of software which provides generic functionality for a certain business use case, and which is customized for a specific customer's needs with additional code. Use of such pre-built code reduces time to market and results in more stable, reliable solutions.
Free Cash Flow	Represents the cash a company generates through its operations, less the capital expenditure. Free cash flow = Cash flow from operating activities – Capital expenditure
FTE	Acronym for Full Time Equivalent
Furlough	A temporary cessation of work without pay for the employees, usually implemented by organizations facing under difficult economic conditions, and in lieu of laying off employees.
Gamification	The process of adding games or game-like elements to any activity in order to enrich experiences and encourage user participation.
GDPR	Acronym for General Data Protection Regulation, a European Union regulation for data protection and privacy.
GHGs	Acronym for Greenhouse Gases; refers to gases that trap heat in the atmosphere leading to global warming and climate change.
Growth and Transformation	Initiatives launched to improve the enterprise's revenues, leveraging technology to adopt new business models, drive new revenue streams, enhance customer experience or target new customer segments. This is in contrast to traditional outsourcing engagements where the focus is on improving efficiency and saving costs.

G&T	See Growth and Transformation
HVAC	Acronym for Heating Ventilation and Air Conditioning System
Hybrid Cloud	An enterprise IT infrastructure model that combines private clouds, public clouds and on premise data centers, to meet the compute and storage needs of the business.
Innovation Days	Focused workshops with a TCS customer where researchers and business leaders from both organizations participate to explore emerging technologies for specific customer problems.
Innovation Forum	TCS' thought leadership event that is held in North America, UK, Latin America and Japan. It brings together researchers from academia, innovators from the start-up ecosystem, technology watchers, futurists and customers to brainstorm around emerging technologies.
Inorganic Growth	Growth in revenue due to mergers, acquisitions or takeovers, rather than due to an increase in the company's own business activity.
ISO	Acronym for International Organization for Standardization
ISV	Acronym for Independent Software Vendor; a key market segment serviced by TCS' Hi-Tech business vertical. Leading software product vendors across the world engage TCS to help them build new features and functionality, maintain older versions of their products, or to modernize their existing products with new cloud-native architecture.
Internet of Things	Also known as IoT. Refers to a network of interconnected machines or devices embedded with sensors, software, network connectivity, and necessary electronics to generate and share run-time data that can be studied and used to monitor or control remotely, predict failure, and optimize the design of those machines / devices.
Invested Funds	Funds that are highly liquid in nature and can be readily converted into cash. Invested funds = Cash and Cash Equivalents + Investments + Deposits with banks + Inter-corporate deposits

Intellectual Property	An asset that is the result of a creative design or idea, such as patents, copyrights, reusable code, software products and platforms, and gives the owner exclusive rights over its usage, such that no one can copy or reuse the creation without the owner's permission.
Interactive Technology	Allows for a two-way flow of information through an interface between the user and the technology; the user usually communicates a request for data or action to the technology with the technology returning the requested data or result of the action back to the user.
Involuntary Attrition	A reduction in the workforce due to the employer's decision to terminate employment, instead of the employees' decision to leave.
IoT	See Internet of Things
IP	See Intellectual Property
kL	Acronym for the unit kilo-liters used to measure volume. It is a unit used to measure and report water usage.
KMP	See Key Managerial Personnel
Key Managerial Personnel	At TCS, this refers to the Chief Executive Officer, Managing Director, Chief Operating Officer, Chief Financial Officer, and the Company Secretary. Please refer to the Company's policy on KMP: http://www.tcs.com/ir-corporate-governance
kWh	Acronym for kilowatt hours used as a unit of measurement of electricity
LatAm	Acronym for Latin America
Location Independent Agile	A method to orchestrate globally distributed stakeholders and talent into Agile teams for improved speed to market in large transformational programs. It comprises processes, structure, and the technology that allows enterprises to overcome location constraints and embrace Agile methods on a global scale.
Machine First™ Delivery Model	A model that integrates analytics, AI and automation deep within the enterprise to redefine how humans and machines work together and to effectively deliver superior outcomes.

Machine Learning	A type of artificial intelligence that provides computers with the ability to learn behaviors without being explicitly programmed.
Managed Services	This is the practice of outsourcing to one service provider, also known as the Managed Services Provider (MSP), the end-to-end responsibility for providing, or orchestrating the provision through third party providers of, services around a range of processes and functions, in order to improve efficiency, service quality, agility and scalability.
Managed Services Provider	Service providers with the sole, end-to-end responsibility of providing Managed Services.
Market Capitalization	The total market value of a company's total outstanding equity shares at a point in time. Market Cap = Last Trading Price * Total number of outstanding shares
MEA	Acronym for Middle East and Africa
Metaverse	Virtual-reality space in which users can interact with a computer-generated environment and other users. Metaverse is a merging of virtual, augmented, and physical reality, and blurs the line between online and offline interactions.
MFDM™	Acronym for Machine First Delivery Model
Minimum Viable Product	The most basic version of a new product, with the bare minimum functionality, which can be released to the users at the earliest, to be augmented with incremental features and functionality over subsequent iterative cycles. MVPs can be used by teams to learn about user behavior and validate the product value with minimum investment.
MJ	Acronym for Mega Joule used as a unit of measurement of energy (electricity as well as fuel use)
Mobility	Information, convenience, and social media all combined together, and made available across a variety of screen sizes and hand-held devices.
MSP	See Managed Services Provider

MVP	See Minimum Viable Product
MWh	Acronym for megawatt hours used as a unit of measurement of electricity. 1 MWh=1000kWh
Net Zero	Net zero refers to a state in which the greenhouse gases emitted into the atmosphere due the company's activity are minimized through a series of initiatives and the residual emission is compensated by removal of equivalent amount of GHG emissions elsewhere through carbon offsets.
Non-Controlling Interest	The share of the net worth attributable to non-controlling shareholders of the subsidiaries.
Non-discretionary Spend	Also known as Run the Business (RTB) spend, is that portion of the IT budget that covers the basic IT activities required to keep a business running. Even in tough economic times, non-discretionary spend remains relatively unaffected.
Options Contract	A hedging instrument that offers the buyer the right to buy or sell the underlying asset (such as stocks or currency) on a future date, at a specified price, for small upfront fee called options premium. Eg: TCS purchases an options contract to sell USD 1mn @ ₹ 77/$ after 3 months, paying an option premium of ₹1 million. With this, TCS will have the right to sell USD 1mn at an exchange rate of ₹77, even if the prevailing market rate at the end of three months is, say ₹75. On the other hand, if the market rate is higher, say ₹79, then TCS can choose to let the options contract lapse and instead sell at the market rate.
Order Book	See Total Contract Value
Organic Growth	The revenue growth a company can achieve by increasing its existing business activity. This does not include growth attributable to takeovers, acquisitions or mergers.
PaaS	See Platform as a Service
PAS 2060	Internationally recognized standard by the British Standards Institution to verify and substantiate an organization' claim of carbon neutrality.

Personalization	Segmentation and responding to individual transactions, customized for a single customer in a single instance.
Platforms	A group of technologies that are used as a base upon which other applications, processes or technologies are developed. Useful for optimizing costs and efforts, and eliminating iterative tasks to drive strategic business initiatives.
Platform as a Service (PaaS)	A category of cloud computing that provides a platform and environment to allow developers to build applications and services over the internet. PaaS services are hosted in the cloud and accessed by users simply via their web browser.
Power Usage Effectiveness	It is the ratio of total amount of electricity used by a data center facility to the electricity used by the computing equipment in the data center.
Pricing	The price charged to the customer for a billable effort, turnkey project or a certain process outcome, depending on the nature of the contract. Some use this term interchangeably (and somewhat inaccurately) with the average revenue realized by the company per utilized effort on an aggregate basis. See Realization.
Private Cloud	Refers to a model of cloud computing where IT infrastructure, in terms of compute and storage resources, are provisioned for the dedicated use of a single organization.
Product	In the technology context, refers to a packaged software program that is made available to multiple customers either on a license basis, or on a subscription basis, to enable the execution of certain common tasks or processes or business functions in a standardized way. This is the opposite of bespoke or custom software which is built to specifications to meet a customer's unique needs.
Public Cloud	A computing service model used for the provisioning of storage and computational services to the general public over the internet. Public cloud facilitates access to IT resources on a 'pay as you go' billing model.
PUE	See Power Usage Effectiveness.

R&I	Acronym for Research & Innovation
Realization	The revenue received by the company per utilized effort. Pricing varies by service and by market. Consequently, there can be changes in realization compared to a prior period, due to changes in the underlying business or geographic mix during the period. This does not necessarily mean that like-to-like pricing has changed. Also, realization doesn't take into account the costs and therefore, higher realization is not necessarily more profitable.
RECs/ GOs	Renewable Energy Certificates / Guarantees of Origin are EACs used in different markets.
Related Party Transactions	Any transaction between a company and its related party involving transfer of services, resources or any obligation, regardless of whether a price is charged. Please refer to the Company's policy on Related Party Transactions: http://www.tcs.com/ir-corporate-governance.
Revenue	The income earned by the Company from operations by providing IT and consulting services, software licenses, and hardware equipment to customers.
RFP	Acronym for Request for Proposal, meaning a document that solicits proposal, often made through a bidding process, by an entity interested in procurement of IT services, to potential service providers to submit business proposals. An RFP is floated early in the procurement cycle and requested information may include basic corporate information and history, financial information, technical capability and estimated completion period, and customer references.
Robotic Process Automation	The use of software tools to automate high-volume, repeatable tasks that previously required humans to perform. RPA is best suited for relatively simple and stable processes. Dynamic changes in the environment require ongoing upkeep of the robots, diluting the economic benefit of the automation. Increasingly, customers are preferring cognitive automation over RPA.
RPA	See Robotic Process Automation

SBWS™	See Secure Borderless Workspaces
Scope 1, Scope 2, Scope 3 emissions	Green house gas emission accounting categories as per the Greenhouse Gas Protocol.
Secure Borderless Workspaces™	TCS' innovative operating model rolled out in response to the COVID-19 disruption. It is a fully location agnostic extension of the Location Independent Agile model, enabling employees to work remotely, while retaining the same high rigor in project management, governance and security. The fully distributed nature of this model is better suited to ensure business continuity. It leverages TCS' prior investments and incorporates the learnings and best practices around network management, standard service delivery environment, digitized governance processes, heavy use of collaborative and cloud based technologies and an internal SOC benchmarked to the best in the industry.
Servitization	Subscription based model that generates recurring subscription fees from a product versus the traditional one-time sale. This applies to software products (Software-as-a-Service) as well as physical products (Product-as-a-Service). In the case of the latter, a key enabler is IoT which allows the seller to monitor the asset remotely.
SEZ	See Special Economic Zone
Shareholder Payout Ratio	The proportion of earnings paid to shareholders as a percentage of the Company's earnings, i.e. Net Income attributable to Shareholders of the Company. Payout can be in the form of dividend (including dividend distribution tax) and share buyback.
Simplification	The rationalization of IT architectures through consolidation of systems and elimination of redundant systems and layers. The primary purpose is to shrink the IT footprint and make operations leaner and more efficient.
Sole Sourced Contract	Non-competitive agreements that allow a single vendor to fulfill the needs of the contractual requirements. These types of contracts can be won when the competitor set narrows down significantly and comes down to a single vendor discussion, given the nature of the client's solution requirements.

Special Economic Zone	In India, these are designated areas in which business and trade laws are different from the rest of the country, with various benefits and tax breaks to promote exports, attract investments, and create local jobs.
STEM	Acronym for education in the fields of Science, Technology, Engineering and Math.
Sustainathons	Platform/environment for multiple entities to come together in a specified timeframe to seek solutions to sustainability challenges. Expectations in a sustainathon includes clear framing of real world issues (problem statements) to drive realistic, technology based solutions. Immediate outcomes may include detailed solution ideas, wireframes, code pieces or apps.
T&M	See Time and Materials Contract
TCS Pace™	A brand promise that represents the way TCS channels its domain knowledge and organizational units – business and technology services, industry solutions units, and the research and innovation organization – into internal and external co-innovation programs.
TCS Pace Port™	Physical spaces where TCS Pace can be experienced. These spaces are close to academic and start-up hubs, and enclose innovation showcases, Agile workspaces and think spaces. They encourage brainstorming, design thinking and collaborative innovation with internal and external partners.
TCV	See Total Contract Value
Time and Materials Contract	A form of services contract where the customer is billed for the effort (in hours, days, weeks, etc.) logged by the project team members. Project risk is borne by the customer. This contrasts with Fixed Price Contracts.
Total Contract Value	An aggregation of the value of all the contracts signed during a period and a useful indicator of demand, and near term business visibility.
Turnkey Contracts	See Fixed Price Contracts

tCO2e	Acronym for tonnes of carbon dioxide equivalent which is used as the unit for reporting greenhouse gas emissions.
Unearned and Deferred Revenue	For invoices raised in line with agreed milestones for services yet to be delivered. In other words, it is the amount that has been invoiced although the underlying effort is yet to be expended.
VR	See Virtual Reality
Virtual Reality	Artificial, computer-generated simulation or recreation of a real-life environment or situation. It engages users by offering simulated reality experiences firsthand, primarily by stimulating their vision and hearing.
Virtualization	The abstraction of IT resources – like a server, client, storage or network – that masks the physical nature and boundaries of those resources from the users of those resources.
Voluntary Attrition	Refers to reduction in workforce resulting from employees willingly leaving the organization to pursue other opportunities, spend time with family, or for some other personal reason.
XR	Extended reality, an umbrella term that covers augmented reality, virtual reality and mixed reality.
Y-o-Y	Year-on-Year

Disclaimer: This glossary is intended to help understand commonly used terms and phrases in this report. The explanations are not intended to be technical definitions. If explanations provided here are found to be different from what is described in the Company's periodic financial statements (not limited to Notes to Accounts), then the definition provided in the certified financial statements will prevail.

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TCS Safe Harbor Clause

Certain statements in this release concerning our future prospects are forward-looking statements. Forward-looking statements by their nature involve a number of risks and uncertainties that could cause actual results to differ materially from market expectations. These risks and uncertainties include, but are not limited to, our ability to manage growth, intense competition among global IT services companies, various factors which may affect our profitability, such as wage increases or an appreciating Rupee, our ability to attract and retain highly skilled professionals, time and cost overruns on fixed-price, fixed-time frame contracts, client concentration, restrictions on cross-border movement of skilled personnel, our ability to manage our international operations, reduced demand for technology in our key focus areas, disruptions in telecommunication networks, our ability to successfully complete and integrate potential acquisitions, liability for damages on our service contracts, the success of the companies in which TCS has made strategic investments, withdrawal of governmental fiscal incentives, political instability, legal restrictions on raising capital or acquiring companies outside India, unauthorized use of our intellectual property, pandemics, natural disasters and general economic conditions affecting our industry. TCS may, from time to time, make additional written and oral forward-looking statements, including our reports to shareholders. These forward-looking statements represent only the Company's current intentions, beliefs or expectations, and any forward-looking statement speaks only as of the date on which it was made. The Company assumes no obligation to revise or update any forward-looking statements.

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