

# IT & TECHNOLOGY SERVICES SEGMENT

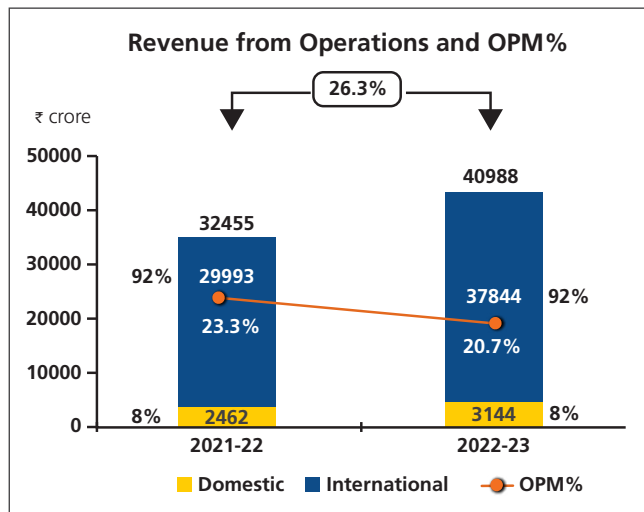


LTIMindtree Headquarters, Powai, Mumbai

## The IT and Technology Services segment comprises:

- (a) LTIMindtree Limited and its subsidiaries
- (b) L&T Technology Services Limited and its subsidiaries
- (c) Digital Platforms and Data Centers

## Financial performance of the segment



The segment recorded revenue of ₹ 40,988 crore for the year ended March 31, 2023, registering a growth of 26.3% over the previous year, reflecting the improved growth opportunities in the sector. International revenue constitutes a steady 92% of the total revenue of the segment.

The segment's operating margin has declined to 20.7% from 23.3% in the previous year mainly due to a one-time integration expense on consolidation of the two companies (LTI and Mindtree) and an increase in employee costs on the roll-out of staff augmentation programme and wage hikes.

The funds employed by the segment as at March 31, 2023, at ₹ 29,106 crore increased by 9.8% compared to March 31, 2022, mainly reflective of improved activity levels.

## LTIMindtree

### Overview

LTIMindtree (LTI) is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation and maximise growth by harnessing digital technologies. As a digital transformation partner to more than 700 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences and business



*LTIMindtree Headquarters, Powai, Mumbai*

outcomes in a converging world. Powered by nearly 90,000 talented and entrepreneurial professionals across more than 30 countries, the Company combines industry-acclaimed strengths in solving the most complex business challenges and delivering transformation at scale.

During FY 2022-23, the erstwhile Larsen & Toubro Infotech Limited, with an engineering DNA, and Mindtree Limited, with an experience DNA, successfully completed their merger and started operating as a merged entity, viz., LTIMindtree Limited. The combined entity possesses the capabilities of a Tier 1 company, while retaining the agility of a smaller company.

The business has a strong presence in each of the following verticals:

### **Banking and Financial services**

LTIMindtree's strong domain and technology capabilities, focused sub-industry offerings and a strong partner ecosystem enable true end-to-end transformation. The business helps BFSI customers modernise their core, reimagine their go-to-market models, adopt cloud, leverage data and insights and improved engagement with their customers through insightful analytics, personalised marketing and curated experiences. LTIMindtree also helps customers with their ESG journeys by creating strategies, providing intelligence services, managing risks, staying compliant and generating green alpha.

### **Insurance**

LTIMindtree enables solving of complex problems such as digital adoption, fraud management, customer experience, speed-to-market, underwriting profitability, operational efficiency and distribution effectiveness through its domain expertise in technologies such as RPA, AI, ML, data and analytics.

### **Communications, Media and Entertainment**

The CME industry is ideal for applying digital at scale and amplifying business outcomes. LTIMindtree's clients – such as broadcasters, streamers, telecom ISVs and out-of-home services – are using the Company's expertise to open new doors to a limitless future. LTIMindtree has the industry experience to leverage cloud, data, analytics, AI / ML, AR / VR, NFT, metaverse, 5G and IoT, which are pivotal in creating new rules in the CME business.

### **Energy**

LTIMindtree is already powering the digital transformation of energy organisations with technology solutions and services that not only help them achieve their core operational goals of safety, reliability, efficiency and profitability, but also help monitor, track, account and report their carbon footprint. The Company assists in trading carbon credits through holistic emissions management and decarbonisation of



*LTIMindtree Mosaic Centre, Powai, Mumbai*

operations and expansion into renewables. LTIMindtree's comprehensive next-generation solutions are designed for upstream, oilfield services, midstream, downstream and renewables, and are helping clients to adopt an array of emerging technologies to enhance their capabilities in the entire value chain.

### Utilities

Utility enterprises are reinventing themselves towards the path of becoming digital organisations. Most of them have embarked on a digital transformation journey, driven by increased developments in smart grid technologies such as smart meters, AML, smart inverters, advanced T&D sensors, distributed energy resources and behind-the-meter technologies. LTIMindtree understands the new solutions and methodologies required for connecting the physical and digital worlds through end-to-end IT / OT capabilities and is leading the charge in providing automation and control systems, powerful real-time advanced analytics and decision support capabilities, as well as extending customer engagement benefits.

### Healthcare

The Company works with customers across the payer, provider, healthcare product manufacturer, pharmacy and benefits manager landscape, among others, to provide a deep and broad set of business solutions ranging from new and exciting consulting strategies to bold technology

solutions across the enterprise. LTIMindtree helps the entire value chain by deploying cognitive and ML capabilities to improve decision-making, allowing them to leverage data engineering, cloud, AI, ML, process automation, predictive analytics and collaboration tools.

### Hi-Tech

LTIMindtree has been partnering with global Hi-Tech leaders in their journey to reimagine their product and service roadmaps, and has been creating new revenue streams, re-engineering business processes, devising next-generation immersive customer experiences and impacting profitability for the clients. The expertise around cloud-native services, intelligent edge devices, geospatial technologies, core process digitisation, AI and IoT-powered approaches to increasing yields, and an understanding of the subscription economy to amplify clients' business outcomes.

### Life Sciences

The trend of collaboration could be an early signal for healthcare to become more affordable and accessible, while also accelerating personalised medicine and a patient-centred treatment journey. LTIMindtree has been a part of these changes across the industry, creating digital technology-enabled solutions for faster drug discovery, lower R&D costs, more diverse trials, adaptive manufacturing, a transparent supply chain and governed regulatory needs.





*LTIMindtree's state-of-the-art delivery centre, Johannesburg, South Africa*

## Manufacturing

The Company, with its vast experience across manufacturing, helps its clients to quickly adapt to the changing technological environment. Its solutions, service offerings and Domain SMEs are geared to address all IT-related aspects of the Customer-Dealer-OEM-Supplier ecosystem. Clients can reduce operational costs and complexity, and effectively address project risks and compliance with the solutions provided by LTIMindtree.

## Retail & CPG

LTIMindtree leverages technology to drive deeper consumer / customer relationships, reimagine products and services, redefine value chains, and innovate into the future with new business models. With the latest technologies, the Company helps clients to enhance consumer intimacy, drive channel excellence, have a future-ready core, monetise data, and become agile and efficient. This includes leveraging cloud, data sciences, AI, ML, IoT, RFID, AR / VR, automation, etc.

## Travel, Transport and Hospitality

Airlines, freight carriers, logistics companies, cruise liners, hotels and restaurant chains have successfully used LTIMindtree's intelligent technologies to deliver seamless customer experiences, loyalty management, improve freight planning, create resilient supply chains and build dependable demand and capacity management systems. The Company leverages decades of experience and expertise in integrating industry-specific platforms with ERP, partner

systems, virtual technologies, automation, IoT, multi-cloud environments, and data and analytics to stitch cluttered and disjointed applications and infrastructure into a unified digital system.

LTIMindtree has offerings across the following service lines:

- ▣ Customer Success
- ▣ Data & Insights
- ▣ Cloud & Infrastructure
- ▣ Cyber Security
- ▣ Digital Engineering
- ▣ Quality Engineering – Testing
- ▣ Connected Universe – NxT
- ▣ Platform Operations
- ▣ Geospatial Engineering – NxT
- ▣ Enterprise Cloud Apps
- ▣ Salesforce
- ▣ SAP
- ▣ Oracle

## Alliances and Partnerships

LTIMindtree has built a strong ecosystem of partners that enables it to drive significant value for its clients in an ever-changing technology landscape. Last year, the Company significantly deepened its engagement with partners by



*LTIMindtree campus, Bengaluru*

investing in scaling capacity, co-creating joint offerings, building Centres of Excellence (CoEs) and signing on to exclusive partner programmes to accelerate business momentum in key focus areas such as Cloud, Data, Security and Customer Experience, among others.

The Company also witnessed the inauguration of two state-of-the-art innovation centres in collaboration with AWS and ServiceNow. LTIMindtree now has a 360-degree relationship with many of its strategic partners, which has enabled it to have a resolute focus on achieving joint business outcomes and creating exponential business growth.

With a view to strengthening its existing capabilities in key areas such as Data, Security, Customer Experience and FinTech, LTIMindtree has expanded its alliance portfolio by incubating partnerships with Alation, Thoughtspot, Query Surge, Snaplogic, Redpoint, Treasure Data, Turbotic, WSO2, Cyfirma, TrustMapp, Knowbe4, Everbridge, Workday and Mambu. In addition to this, the Company also signed agreements with Google Cloud, Microsoft and IBM for regional expansion as well as partnering in new joint programmes.

Some of the Company's key partner relationships are:

#### **AWS**

The Company is an Amazon Partner Network Premier Consulting Partner for Amazon Web Services (AWS). The Go-to-Market strategy on AWS is a trifecta approach cutting

across areas like Data & Analytics, Migration and Application Modernisation. LTIMindtree has enabled large Data Center exits and assisted global enterprises in successfully migrating and modernising their applications on the AWS cloud. Additionally, the Company has helped enterprises in migrating from traditional databases to modern AWS databases like AWS Aurora, uncovered business insights and helped customers monetise their data through niche Data and Analytics IPs and Accelerators, built on the AWS cloud.

#### **GCP**

LTIMindtree is a Global System Integrator and Premier Partner for Google Cloud Platform (GCP) and Google Workspace. The Go-to-Market strategy with GCP comprises big bets in the areas of Data Lake Modernisation, EDW Modernisation, Modernise Traditional Applications & Platforms, Mainframe Cloudification and Security Operations. The Company is also a strategic vendor to Google's 'Professional Services Organisation' (PSO), providing Google Cloud customers with qualified partners that have demonstrated technical proficiency and proven success in specialised solutions and service areas.

#### **Microsoft**

The Company has a long-standing 360 Degree Gold partnership with Microsoft and has significantly strengthened its credentials. It also received a solution partner designation in the areas of digital and app innovation, infrastructure, data and AI, security and modern



*LTIMindtree, Kalinga campus, Bhubaneswar*

work. LTIMindtree is also a member of exclusive Microsoft programmes including the Mixed Reality Partner Programme and the Microsoft Security Solutions Provider programme.

#### **IBM**

LTIMindtree is an IBM GSI and Platinum Business Partner with global coverage. The Go-to-Market priorities with IBM include digital business automation, sustainability, hybrid cloud and security. LTIMindtree has six Expert-level IBM competencies in Digital Business Automation, Cloud Integration and Development, Assets and Operations, Cloud Management, Threat Management and Digital Trust. The IBM Partner Solution Showcase portal now includes LTIMindtree's joint offerings iDigitalisation (iDz) and Digital Hybrid Infrastructure Platform (DHIP).

#### **SAP**

The Company is one of SAP's 19 Global Strategic Services Partners (GSSP) which assists organisations in leveraging the latest SAP innovations such as RISE with SAP, S / 4HANA Cloud (Private / Public), Industry Cloud Solutions, SAP Business Technology Platform (BTP) based Platform-as-a-Service (PaaS) offerings, Sustainability, Mid-market and various other solutions.

#### **Oracle**

For over 20 years, the Company has been a trusted partner of Oracle, enabling customers to leverage cloud technology. As a Global Expertise and Cloud Solutions

Provider Expertise partner, LTIMindtree collaborates with Oracle on marketplace offerings, competency centres and customer advisory boards. LTIMindtree's services include Oracle Cloud Application, Oracle Cloud Infrastructure, Enterprise Applications and Industry GBU Applications. Its expertise lies in Oracle Application Development, Digital Native Applications, Applications to Oracle Cloud, Database to Oracle Cloud, DevOps, Platform Integrations and Data Management.

#### **Snowflake**

The Company has established a strong partnership with Snowflake, earning the highly coveted Elite Partner status and being named one of Snowflake's top three partners globally.

#### **ServiceNow**

LTIMindtree's strategic partnership with ServiceNow spans programmes like Sales, Services, Service Provider and Technology Partner Programme. LTIMindtree has become an Elite partner of ServiceNow. LTIMindtree's Managed IT Services solution helps the client to get the speed and quality of IT services required to be on top of changing business needs.

#### **Salesforce**

The Company is an established premium consulting partner of Salesforce, with over 18 years of experience on the platform. As a Summit (Platinum) Partner, LTIMindtree





*LTIMindtree - Immersive Aurora*

specialises in Salesforce / MuleSoft implementation strategies to drive digital growth through deep client engagement. The services range from Strategy Consulting and Solution Design to Implementation and Application Value Maintenance.

#### **Adobe**

LTIMindtree is a Global Platinum Solutions Partner for Adobe - the highest level of GSI partnership that they offer. The GTM focus areas cut across Data and Personalisation, Omnichannel Commerce and End-to-End content lifecycle. The partnership brings a full suite of customer experience transformation services to their digital transformation programmes.

#### **Pega**

LTIMindtree and Pega's partnership has strengthened significantly in FY 2022-23. The acquisition of Ruletronics, a pure-play Pega consulting and implementation player helped scale up the Pega credentials significantly. During the year, LTIMindtree was included by Pega in its exclusive list of Global Strategic partners. With Industry and Marketplace Solutions, Successful Customer Implementations, a Certified skill set and joint GTM activities, the Company has earned a reputation as one of the most valuable and preferred partners for Pega.

#### **Hitachi Vantara**

The Company partners with Hitachi Vantara as a Global System Integration Partner, helping clients harness the

potential of digital technologies. The GTM focus areas are along Storage-as-a-Service, VDI-as-a-Service and IaaS (Infrastructure-as-a-Service). LTIMindtree leverages Hitachi Everflex to offer the power to scale-up and flex as businesses demand change and efficient pay-as-you-go offerings to keep IT costs aligned with business usage with powerful SLA guarantees.

#### **Cisco**

LTIMindtree is a Cisco Gold Partner with a 360-degree relationship. The collaboration with Cisco enables LTIMindtree to provide next-generation IT solutions and services to its customers by leveraging various Cisco architectures. The Company leverages the Cisco partnership in initiatives for software-defined networking, data center transformation, application transformation security, unified communication, IoT and smart city projects.

#### **Duck Creek**

The Company is a Premier System Integrator partner of Duck Creek Technologies with over 20 years of experience on the platform. LTIMindtree specialises in Duck Creek solutions and services to help insurance clients globally transform their businesses using modern core systems and digital innovation. The differentiated solutions increase business agility, accelerate product rollouts, maximise operational efficiency, leverage cloud adoption, enhance customer experience and deliver meaningful cost savings for insurance carriers using the Duck Creek platform.



*LTIMindtree Digital Pumpkin, New Jersey*

## Business Environment

For the IT industry, FY 2022-23 has been a year of continued revenue growth with a focus on strengthening the industry credentials and building on trust and competencies. The volatile global economic scenario and higher cost pressures continue to support the demand for technology adoption and digital acceleration. Consequently, technology continues to be a strategic imperative that is a critical component of business innovation and transformation, as well as a source of improving operational and cost efficiencies.

India's technology industry exhibited continued growth in constant currency terms and is expected to cross USD 245 billion in FY 2022-23.

Further, NASSCOM anticipates that the sector is on track to hit USD 500 billion by 2030. The proportion of digital tech in the overall technology services revenue has been increasing with every passing year. From around 26-28% in FY 2019-20 to leapfrogging to over 32-34% in FY 2022-23, there has been increasing penetration of digital tech in the industry. The industry continues to be a net hirer, adding 2.9 lakh new jobs and taking the total employee base to ~54 lakh (5.7% y-o-y growth), strengthening its position as the 'Digital Talent Nation' for the world.

## Key Deal Wins

- A leading digital marketplace for the automotive industry has selected the Company as its lead transformation

partner for the consolidation of all digital initiatives

- A leading North American public utility company has chosen the Company as a strategic long-term partner for Infrastructure & Cloud Managed services
- An Energy and Utility company partnered with LTIMindtree to lead their digital transformation journey towards green energy
- A North American Energy company selected LTIMindtree for a multiyear deal involving Data, Cloud enablement and Infra and Managed services

## Significant Initiatives

LTIMindtree has always strived to leverage its capability in diverse domains and is also continually investing in building expertise in exponential technologies. While last year, the areas identified were Metaverse, Cloud, Analytics, Industry 4.0, Artificial Intelligence (AI) and Automation, this year has witnessed an exponential deep dive into some of these identified areas where LTIMindtree was able to identify dependent technologies that would take it to the next level. For example, in Metaverse, LTIMindtree was investing in Web3 & Decentralisation, Mixed Reality, Generative AI, Spatial Technologies and IoT for Smart Spaces. Quantum Technologies, AI-driven Automation and a focus on ML and LLMs are other areas LTIMindtree has identified for its medium-term absorption roadmap.

The real-time tracking of technology absorption has enabled LTIMindtree to classify technologies under 3 categories such as evolving/expanding immersive experience, accelerated AI automation and optimised technology delivery.





*LTTS Innovation Lab*

## Outlook

The global economic environment is likely to remain uncertain and volatile. The IT industry faces challenges ranging from geopolitical tensions to supply chain uncertainties, ongoing semiconductor and raw material shortages as well as enactment of new legislations across different countries and possible trade restrictions impacting business outcomes. Globally, the enterprises are likely to see headwinds – demand contraction in some markets – and this uncertainty may result in delayed decision-making.

Nevertheless, NASSCOM's Annual CXO Outlook Survey 2023, indicates that while enterprises' digital transformation remains a core strategic priority for 2023, cost takeout and optimisation requirements are expected to remain in demand given the macro environment. AI and analytics, cybersecurity and cloud-related spends are in a multi-year super cycle and shall remain the primary catalysts of growth along with more integrated use cases and higher value realisation.

Finally, the business will continue to invest in innovation, new growth engines and platform-led delivery models and keep expanding through organic and inorganic means to get access to new capabilities and geographies.

## L&T Technology Services

### Overview

L&T Technology Services Limited (LTTS) is a leading global pure-play Engineering Research and Development (ER&D) services provider. The business offerings comprise consultancy, design, development and testing services across the product and process development lifecycle.

LTTS provides services and solutions in the areas of software and digital engineering, embedded systems, engineering analytics and plant engineering. Its customer base includes 69 Fortune 500 companies and 57 of the world's top ER&D companies across multiple segments, viz., transportation, telecom & hi-tech, plant engineering, industrial products and medical devices. The Company's engineers and technologists collaborate with leading global firms to drive smart solutions and services for new product development, facilitate remote asset management and enable virtual product design and prototyping.

In the Q4 FY 2022-23, LTTS crossed a significant milestone of achieving a USD 1 billion revenue run rate, underscoring its dominant position amongst the leading global ER&D companies.



*LTTS' Lab-as-a-Service (LaaS) offering enables robust testing and validation for next-gen networks*

The key differentiators for LTTS' business are its value-maximising customer-centric innovations, domain expertise and a multi-vertical presence spanning major industry segments:

### Transportation

LTTS' Transportation Engineering services enable global OEMs and Tier 1 companies to develop next-generation vehicles and aircraft systems, achieve a faster time-to-market and drive innovation across their respective domains.

The Company partners with global customers in the automotive domain, leveraging its robust and reliable platform and solution offerings across key emerging areas, including, Electrical Vehicle (EV) technologies, Advanced Driver Assistance System (ADAS) and Autonomous Drive (AD) frameworks.

LTTS has over a decade of expertise in the Trucks and Off-Highway segment and offers its services across Construction and Mining, Cranes and Material Handlers, Commercial Vehicles, Agricultural and Gardening Equipment, Powersports and Polymer industries.

In the aerospace sector, LTTS' offerings encompass a wide spectrum across aero engines, aerostructures and systems, avionics, air traffic management systems and new-age digital transformation solutions. The Company is helping Aerospace OEMs and Tier 1 manufacturers maximise ROI, meet compliance standards and enhance quality.

### Industrial Products

LTTS leverages its deep domain expertise in software, hardware, mechanical engineering, industrial networking protocols, the Industrial Internet of Things (IIoT), smart industry products, test frameworks and enterprise control systems to support its growing customer base for industrial products worldwide. The results are translated into a robust presence across building automation, home and office product design, energy management, process control and machinery design.

The Company is also involved in driving global supply chain optimisation to help customers explore alternate sourcing avenues in the post-pandemic economy. With digital manufacturing emerging as a major focus area, LTTS is driving multi-layered digital transformation initiatives for customers to help unlock the true potential of emergent technologies in the Industry 4.0 ecosystem.

Following its acquisition of L&T's Smart World and Communication business (SWC), LTTS is set to expand its capabilities with new-age offerings around Sustainable Smart World, leveraging the global momentum in favour of smart spaces and integrated facilities.

### Telecom & Hi-Tech

LTTS' Telecom & Hi-Tech vertical delivers engineering services and solutions across five major domains, viz., Telecom, Consumer Electronics, Semiconductors, Independent Software Vendors (ISVs) and Media & Entertainment (M&E).



*Engineers work in LTTS' Electrification & Prototype Centre, Peoria, USA*

The business is leveraging its extensive ER&D capabilities to enable leading telecom OEMs and CSPs across geographies to help organisations unlock value from private networks for business applications. With the acquisition of L&T's Smart World & Communication business, LTTS is set to enhance its capabilities and offerings across the next-gen communications space by driving significant network architecture, orchestration and management capabilities.

The Company supports its semiconductor customers with a range of services covering hardware system design, platform software development, modem services, verification and validation, multimedia, connectivity, storage, mechanical engineering and customer engineering facilities.

LTTS has long-standing partnerships with leading ISVs for cutting-edge VLSI, application engineering, cloud engineering, platform development and migration, product uplift and support, and testing and certification solutions.

In Media & Entertainment, the Company's offerings span product engineering, conceptualisation, design and development, testing and certification, manufacturing support, maintenance, and value engineering. LTTS continues to explore and expand its partnership ecosystem with leading participants in the emerging OTT space to capitalise on the momentum generated by tectonic shifts in global media consumption patterns.

## Plant Engineering

LTTS offers chip-to-cloud capabilities across designing, engineering, project management, handover operations, and delivery and maintenance of custom digital solutions. The Company is an Engineering, Procurement and Construction Management (EPCM) services specialist and supports stages across a plant's lifecycle – from conceptualisation to commissioning. LTTS' multiple Value Engineering Centres across geographies help drive business success for its global customers.

LTTS' Plant Engineering vertical caters to diverse industries, including Consumer Packaged Goods, Chemicals and Energy & Utilities. The Company's digital solutions continue to enable manufacturers in their journey to upgrade, integrate and redefine their legacy operations with smart platforms, state-of-the-art connectivity and deep synergies for delivering transformative business outcomes.

## Medical Devices

Combining an industry presence of over three decades with multi-vertical engineering expertise, the business works closely with leading healthcare providers and device manufacturers. This includes delivering solutions for remote medical care, Quality Assurance and Regulatory Affairs (QARA), in-vitro diagnostics, patient mobility solutions, surgical services, home healthcare and the Medical Internet of Things (MIoT).





Artist's Impression

*High-tech, multi-mode EV charging station combining electric, solar, hydrogen and energy storage technologies*

The Company leverages its digital engineering capabilities to accelerate product development cycles, reduce time to market, deliver sustained value engineering and ensure seamless multi-geography compliant product launches for healthcare device manufacturers. The business offerings include digital health management and healthcare operations, cover chronic disease management, remote monitoring, decision support, clinical workflow optimisation, care collaboration portals and health monitoring platforms.

LTTS continues to redefine the current medical product design methodologies with cutting-edge digital technologies, solutions, and platforms, ensuring business success for its global customer base through enhanced regulatory compliance, best-in-class quality and revitalised operational paradigms.

## Business Environment

The global ER&D landscape is expected to maintain its robust growth trajectory. Zinnov estimates the industry to be worth around USD 2 trillion by 2025, growing at a 6% CAGR. Digital engineering is projected to constitute over 53% of this global ER&D spend, with significant traction being expected around emerging and new-age technologies.

The impact of new-age offerings, viz., AI, IoT and 5G is evident in the rising demand for innovative solutions and translates into significant opportunities for global businesses looking to redefine and revitalise their products and services.

Leveraging the availability of a young and talented workforce and combined with a growing focus on innovation, India's share as a destination for global ER&D spend is expected to grow substantially.

The Company's robust growth trajectory continued to be defined by its key differentiators around deep, multi-vertical domain expertise, enabling value-maximising, customer-centric innovations across major industry segments.

## Major Achievements

LTTS registered several major deal wins across all its verticals. Large deal bookings were also high, led by two marquee deals of TCV USD 50 million and USD 60 million, and several others over USD 10 million.

## Key Deal Wins

### Transportation

- Strategic engineering partner to Airbus for providing Advanced Engineering Capabilities and Digital Manufacturing Services under a multi-year contract
- A US-based off-highway equipment OEM company selected LTTS as its strategic partner to develop capabilities around Embedded Software, Control Systems and Software Verification / Validation Engineering
- Five year, multi-million-dollar deal from BMW to provide high-end engineering services for the company's suite of infotainment consoles in its family of hybrid vehicles



*LTTS' 1 DigitalPlace Centre of Excellence leverages next generation manufacturing technologies to enable customers to redefine their product journeys*

### Industrial Products

- ▣ Multi-year product sustenance programme for a large European material handling and logistics automation company
- ▣ Multi-year agreement with a leading energy conglomerate to provide consulting, implementation and sustenance of Asset Integrity across the customer's major assets
- ▣ Chosen as an engineering partner by a global provider of industrial automation, for end-to-end product design, firmware development services and the development of automation platforms

### Telecom & Hi-Tech

- ▣ A global technology company selected LTTS as its preferred technology partner for developing robust testing and accelerator frameworks for its embedded systems
- ▣ Selected by an American technology company for developing safety libraries and embedded firmware implementation for its family of chipsets. The engagement includes LTTS software safety qualifications, CSP generation, architecture and software components design.
- ▣ LTTS was empanelled by a leading network solutions provider to build, operate and manage a 5G radio testing lab for end-to-end test services on ORAN (Open Radio Access Network), including lab operations and management services.

### Plant Engineering

- ▣ Engineering partner for a global Oil & Gas major for niche engineering and technology support to help the customer expand its market share
- ▣ Preferred partner for the digital transformation of a large Swedish food processing and packaging company's integrated content management system to drive standardisation and compliance
- ▣ A large Industry 4.0 deal from a leading multinational food and beverage company to improve operational efficiencies by re-engineering centralised maintenance operations

### Medical Devices

- ▣ A medical devices leader awarded LTTS a multi-year engineering programme contract for its product line
- ▣ Data engineering programme for a global healthcare provider to track and monitor the execution of triage and vigilance preparation and to help accelerate productivity and reduce training costs
- ▣ Programme to help an international healthcare firm harmonise and streamline their Quality Management Systems (QMS) across North America, covering support across R&D, product quality, manufacturing and supply chain management



LTTS' Think Studio

## Significant Initiatives

LTTS has continued to invest significant time and effort in strategic initiatives that will propel its technology footprint, engineering infrastructure and human resources, with the objective to provide a differentiated experience to its customers.

- ▣ LTTS inaugurated its Engineering Design Centre (EDC) in Toulouse, France, to cater to the new-age digital requirements of the global aerospace and defence sectors. The centre will specialise in end-to-end solutions for aerospace design and manufacturing.
- ▣ The Company unveiled its Engineering, Research and Development (ER&D) centre in Krakow, Poland, to cater to customers in Automotive, Mobility and Hi-Tech domains. The ER&D centre will support major customers in Europe and North America.
- ▣ LTTS is collaborating with Qualcomm Technologies, Inc., to deploy end-to-end solutions for the global 5G Private Network Industry utilising their combined core expertise in the Hi-Tech & Telecommunication domain
- ▣ LTTS, in collaboration with ISG and with CNBC TV 18 as media partner, initiated the first ever Digital Engineering Awards to recognise and honour engineers and organisations at a global level for their pioneering work and to promote engineering services and technology innovation. The inaugural edition of the Digital Engineering Awards attracted over 120 applications from more than 70 global organisations across North America,

Europe, and the Asia Pacific, active in the Automotive, Aerospace, Industrial Products, Plant Engineering, Telecom and Hi-Tech domains.

- ▣ The Company expanded its global footprint with the launch of a new Engineering Research & Development (ER&D) centre in Toronto, Canada, two new design and prototyping centres in Peoria, USA, and a centre of excellence in Pune, India

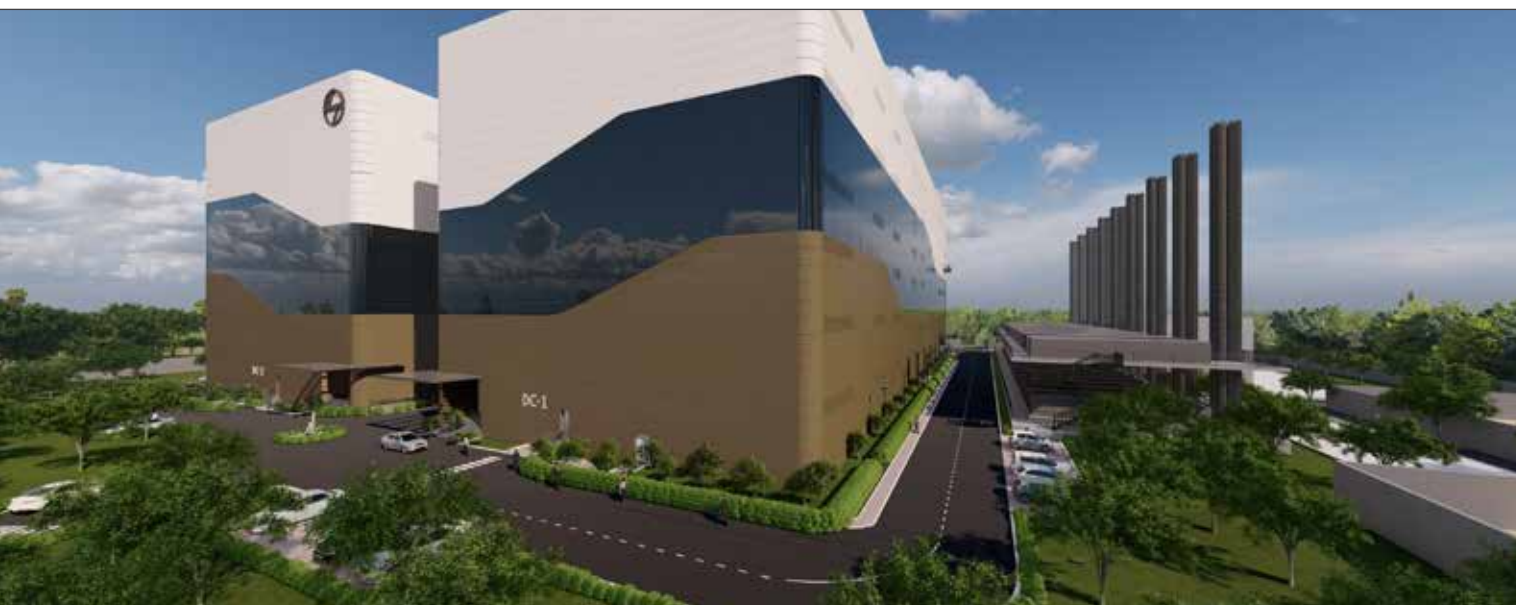
## Outlook

As the nation's largest pureplay ER&D services provider, LTTS registered double-digit growth during FY 2022-23. This is built on top of its stellar 20% growth achieved during FY 2021-22. Digital and emerging technologies were the key drivers of this journey as the Company now focuses on the next milestone, to be at the forefront of innovation-led growth.

The Company's industry-leading performance continues to be defined by significant investments across emerging technology areas, including the six Big Bets – Electric Autonomous & Connected Vehicles (EACV), 5G, MedTech, Digital Products & AI, Digital Manufacturing and Sustainability. The Company is witnessing significant traction across each of these focus areas, with several marquee deal wins in the global markets.

The Company's deep engineering and domain expertise continues to drive innovation across cutting-edge devices, evolved manufacturing practices, and state-of-the-art products and services. Achieving yet another milestone of





*Kancheepuram Hyperscale Data Center, Tamil Nadu*

filing over 1,000 patents to date further demonstrates the Company's technological prowess.

The Company's acquisition of L&T's Smart World and Communication (SWC) is expected to be a major enabler in this direction. SWC has a proven track record of delivering innovative solutions in the areas of next-gen communications, sustainable smart world and cybersecurity – core capabilities in alignment with three of LTTS' six Big Bets. The business is well placed to take these offerings to the global market, besides delivering additional value for existing customers and leveraging the new capabilities acquired.

LTTS is present in 25 countries worldwide. It is adding talent and capabilities across focus geographies as a part of the continued commitment to drive global expansion.

The Company continues to explore new partnerships with leading global organisations to redefine and revitalise the digital journeys of its customers across industries and geographies, reaffirming its vision of Engineering a Sustainable Tomorrow through Technology and Innovation.

## Digital Platforms and Data Centers

This business mainly includes new-age businesses incubated by the Company namely L&T EduTech, L&T-SuFin and Data Centers. These ventures are a part of L&T's plan to leverage

digital technologies in some of its core domains in order to future-proof them and tap future growth opportunities.

## L&T EduTech

L&T EduTech is an Edtech platform launched in October 2021 offering a superior online and hybrid educational experience by using a technology-intensive, user-friendly platform. It collaborates with universities, corporations, Non-Governmental Organisations and Government bodies to provide access to state-of-the-art technical and skill-based education. With its robust learning management system, skill exchange platform, knowledge sharing community (Engineers Ensemble: National Engineers' Forum) and micro-learning platform (endorsed by All India Council for Technical Education [AICTE]) the platform facilitates lifelong learning, enhancing the learner's educational journey.

The four major verticals of L&T EduTech are:

**College Connect:** This vertical aims to narrow the gap between academic learning and practical industrial experience. It offers courses in core Engineering, Information technology, Arts and Science with industry-specific application knowledge. This vertical also organises career guidance sessions, conducts regular faculty development programmes and offers industry immersion programmes to deliver a superior learning experience to both teachers and students.



*L&T EduTech - building value for learners, academia and industry*

**Professional Skilling:** This vertical offers upskilling and reskilling opportunities for corporate employees with a number of product packages, including .Net, Java, Data Analytics, Cybersecurity and more.

**Assessments:** This vertical runs a robust auto-proctored assessment platform that helps organisations in their recruitment process of fresh talent and workforce development. It includes workplace competency assessments, hands-on coding assessments, National Engineering Competency Test (NECT), etc.

**Vocational Skilling:** This vertical provides e-learning courses to blue-collar employees in diverse industries, with a focus on ensuring safety, quality and productivity.

We are planning to add Emerging Tech business as a new vertical next year, which will include skilling in futuristic areas, viz., Electric Vehicles, Drone Technology and Meta.

## Major Achievements

- ▣ Collaborated with over 40 colleges and 10+ corporations for numerous skilling programmes
- ▣ Partnered with over 10 renowned companies for course content and software integration
- ▣ Signed MoU with AICTE to be a partner in ensuring high-quality technical education to all sections of the society
- ▣ Collaborated with Gujarat Technological University (GTU) to offer niche industry-abridged certification courses directly to students of GTU and its affiliated colleges

- ▣ Collaborated with KPR Institute of Engineering and Technology (KPRIET) to launch Experience Engineering, a joint venture immersive learning centre
- ▣ Engaged with Tamil Nadu Skill Development Corporation (TNSDC) and Additional Skill Acquisition Programme (ASAP) Kerala to upskill students from the higher education segment
- ▣ Signed an MoU with Construction Skill Development Council of India (CSDCI) that would certify that the digital content curated by L&T EduTech would meet the National Skills Qualifications Framework standards, conducting assessments, facilitating placements, sharing demand, etc.

The Indian edtech market is expected to reach USD 30 billion by 2031, from USD 700-800 million in 2021. According to KPMG, India has also become the second largest market for E-learning after the US. Industry-led curriculums and cross-functional credits are only going to increase in number since there is a dearth of continuous industry-based knowledge and upgradation among the students and professionals of India. Additionally, digitalisation has made it easier for people to learn at their own pace, anytime and anywhere. These factors provide a positive outlook for the scalability of L&T EduTech in the years to come.

## L&T-SuFin

L&T-SuFin is a platform which was launched in March 2022 for SME / MSME buyers and sellers to connect in an efficient



*L&T-SuFin helps MSMEs in the supply chain to grow by becoming more efficient, competitive and productive*

and transparent manner, thereby enabling sellers to expand their sales reach and for buyers, to find the right products and services at an optimal cost and quality. The platform offers a wide product range in industrial supplies and consumables, building and construction materials, electrical and electronics equipment, machinery tools and mechanical equipment and packaging, printing and office supplies, etc.

In 2022, B2B E-commerce GMV (Gross Merchandise Value) was USD 11 billion in India and is expected to reach USD 55 billion by 2027. Similarly, the total transaction value in the Digital Payments segment in India is projected to reach USD 150-200 billion in the next 3-4 years from the current USD 65 billion. Clearly, India is undergoing a Digital Revolution. L&T is also playing its role in this space by launching L&T-SuFin – an E-Commerce platform which has just completed its first year of operation.

**Major features offered by L&T-SuFin include:**

- ▣ Discovery of the B2B products market and sellers through an efficient digital process
- ▣ Getting a competitive price through a Request for Quotation (RFQ) mechanism and online transaction fulfilment
- ▣ Financing support from partner banks and NBFCs
- ▣ Logistical support, including transit insurance

In the first year of its operations, the business has catalogued over 3 lakh Stock Keeping Units (SKUs) in 45 categories. The business has onboarded over 30,000 sellers on the platform

in FY 2022-23. L&T-SuFin has been recognised as one of the 10 Most Promising B2B Marketplaces in India by Silicon India magazine in the year 2022.

The Business has also implemented several new initiatives to catalyse growth and scale up further. These include:

- ▣ Original Equipment Manufacturers (OEMs) are being approached for nominating Key Distributors or Dealers (Key Sellers) of their brands who would provide competitive rates and assured service of the branded products in order to make these items attractive on the platform
- ▣ To improve the adoption rate for Request for Quotation (RFQ) generation and response by simplifying guidance on the platform and implementing WhatsApp-based RFQs. A central RFQ team has been formulated which provides assisted RFQs for Buyers requiring Platform assistance but having critical volumes
- ▣ Providing finance to the Buyer or Seller for doing transactions on the platform through Partner Banks or NBFCs has created higher dependency and repeat purchases on the platform

The business is planning to venture full-fledged into white-labelling of goods from the next year, by tying up with Contract Manufacturers and selling in the market through its registered brands for select products. The business has also entered a partnership with CREDAI-MHCI and has done industry events with recognised bodies like CII, ASSOCHAM





*L&T-SuFin, India's first online business platform for industrial and construction products, integrated with finance and logistics options*

and various local chambers, etc., to strengthen industry connections and get new leads.

In FY 2023-24, the business plans to achieve ISO 27001 compliance and will also be available through a mobile app, leading to greater ease of usage and convenience.

## Data Center and Cloud Services

L&T's Data Center is a new business unit of L&T which will offer Colocation Services (space, power, CCTV monitoring) to MSME and other enterprises. In addition, it will also offer Cloud Services as (a) Infrastructure as a Service-IaaS (viz., Application Integration Services) and (b) Platform as a Service-PaaS (viz., operating systems and database management) models. The Company has committed investments to set up modern state-of-the-art Data Centers in Mumbai and Chennai. A website named L&T-Cloudfiniti has been launched to provide these services.

Data Centers contain physical or virtual servers that centralise shared IT operations and equipment for the purpose of storing, processing and disseminating data and applications with critical infrastructure such as power, cooling and internet connectivity.

India's Data Center market is one of the fastest growing, with 138 data centers (~750 MW) in FY 2021-22 and new data centers with 1,000+ MW capacity expected to come up by the end of FY 2024-25. With an aim to achieve a Digital Economy of USD 1 trillion by FY 2025-26, the Government of India has come out with many incentive schemes to support the ecosystem of the Telecommunication and Information Technology industry by creating a conducive environment for Data Center business growth in India.

Finally, India has witnessed a major change in its technological landscape in the last 10 years, making fast-paced progress towards a full-fledged digital economy. With time, the volume of data and need for analytics is only expected to move higher, thereby creating an acute need to have multiple data centers. Further, policies around data localisation also accentuate this requirement. Although there are a few concerns like lack of a unified single window clearance across the country for setting up Data Centers, unavailability of redundant infrastructure such as network and power connectivity and scarcity of skilled manpower, the business is reasonably confident to cross these teething hurdles and emerge successfully as a leading player in this fast-growing sector.