



Crescent Bay, Mumbai

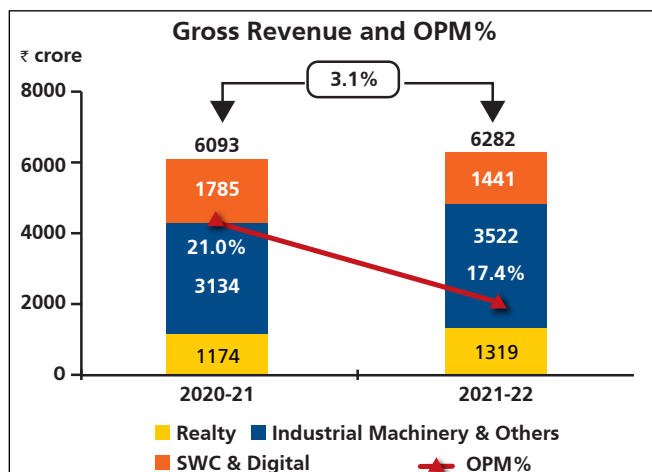
OTHERS

'Others' business comprises:

- Realty Business
- Industrial Machinery, Products & Others comprising of Construction & Mining Equipment, Rubber Processing Machinery and Industrial Valves
- Smart World & Communication
- Digital Business

Financial Performance of the Segment

Revenue for the segment registered a growth of 3.1% from



₹6,093 crore to ₹6,282 crore in FY 2021-22. The growth was in the Realty business on higher handover of flats and improved demand in Construction Equipment and Rubber Processing Machinery business. Supply chain disruptions and extended conversion cycles impacted the Valves business whereas completion of projects and lower execution momentum in the new jobs impacted revenues of Smart World & Communication business.

The operating margin declined over the previous year since FY 2020-21 included a non-recurring gain on sale of a commercial property in the Realty business.

The funds employed by the segment as at March 31, 2022 at ₹8,074 crore increased by 5.5% compared to March 31, 2021 largely attributed to inventory build-up of under construction property in the Realty business.

REALTY BUSINESS

L&T Realty is positioned amongst the top real estate developers in India, with development potential of ~ 60 Mn. sq. ft. across residential, commercial, and retail segments in Mumbai, Bengaluru, NCR and Chennai. The business model includes development in partnership with land / development rights owners, and sale / leasing of commercial spaces.



Seawoods Grand Central, Navi Mumbai

Residential Segment

1. Emerald Isle, Mumbai

This flagship residential project in Powai spread over 90 acres and developed in phases. A new phase named Veridian was launched during the year. Regarded as the finest gated community, the project today has a lively community of over 1,000+ resident families.

2. Elixir Reserve, Mumbai

Elixir Reserve is a premium residential project in Powai that is enveloped in a picturesque setting. This project is replete with state-of-the-art amenities, including an ICSE school, office towers and retail spaces within walking distance.

3. Crescent Bay, Mumbai

With the Arabian Sea as the backdrop – Crescent Bay is a residential complex at Parel with the perfect setting for an exclusive lifestyle. The highlight of the development is a sky deck and other lifestyle amenities on level 21. The project is complete and occupied by 1,100+ families.

4. Seawoods Residences, Navi Mumbai

Part of India's first Transit-Oriented Mixed-Use Development, Seawoods Development is spread across over 40 acres. Seawoods Residences offers unmatched connectivity and is surrounded by breath-taking views. It's a successful project, sold out on launch. More phases are expected to be launched soon.

5. Rejuve 360, Mumbai

Designed on the wellness thought, this residential complex is focused on the rejuvenation of mind, body, and soul. Conveniently located in Mulund west, Mumbai Rejuve 360 has sustained its position among premium developments in the micro-market.

6. Centrona, Mumbai

Centrona is a gated community situated in Ghatkopar and has functional residences with unmatched comforts and conveniences. The location boasts of being within easy reach of the city's most iconic locales, providing easy access to every corner of the city. With world-class amenities, it is perfect for people who want to spend more time with their loved ones.

7. Raintree Boulevard, Bengaluru

Conceptualised on the live-work-play theme, Raintree Boulevard is a 65-acre mixed-use project located in the high-growth micro-market of Hebbal. Situated just 20 mins away from the airport, the project offers fine-living and best-in-class amenities. L&T Tech park and a large format mall are within walking distance from the project. 1,000+ happy families are already residing at the project. Launched in phases, Olivia at Raintree Boulevard is a luxury offering launched during the year.

Commercial Segment

1. Seawoods Grand Central, Navi Mumbai

India's first Transit-Oriented Development (TOD), Seawoods Grand Central offers 2.6 Mn. sq. ft. of Grade A development with a unique combination of commercial and retail business spaces.

2. Technology Centres, Mumbai

Designed to provide superior workspaces, it is a part of a larger integrated development promoting the 'walk to work' concept. It is one of the coveted corporate addresses in Powai, Mumbai with proximity to excellent social infrastructure. Much of this development is already completed and some has been effectively divested.



Elixir Reserve, Mumbai

3. Technology Park, Bengaluru

Located in the rapidly growing micro market of Hebbal, the project has the potential for development of commercial office spaces of 3.1 Mn. sq. ft., which is being taken up in phases. With unmatched connectivity and well-designed spaces, it is set to become the most favoured address for many technology companies.

4. L&T Innovation Campus, Chennai

Coming up on a 40-acre plot in the IT hub of Chennai, the 6.5 Mn sq. ft. L&T Innovation Campus project will be developed in phases. It will bring together world-class innovation business / IT hub, and an eclectic mix of leisure and lifestyle amenities, with a lush central parkland at its core. The development offers the convenience of Walk-To-Work.

Business Environment

Post pandemic, the residential sector has shown significant uptake across all top cities, supported by multiple factors such as lower interest rates, better affordability and positive outlook of the economy, resulting in liquidation of existing inventory levels.

Select initiatives by the Maharashtra State Government, particularly lower stamp duty on residential property registrations and 50% concession on development premiums were of great support to the real estate sector.

The continuously rising input cost of basic raw materials like cement, steel and other construction raw materials are current challenges facing the sector.

The regulatory changes / reforms over past few years in the realty sector have created an environment of transparency and reinforced customer confidence, leading to improved housing ownership.

In the backdrop of improved mobility and rapid vaccination drives, employment generation picked up pace in the organised sector, led largely by hiring in the IT / ITES and BFSI sectors. As a result, office leasing activities in India picked up pace in last quarter, registering a healthy growth.

Revival in the real estate space has attracted foreign investors leading to a sizeable inflow of foreign funds into commercial spaces in recent months.

This change, coupled with customers preference for corporate brands offers a unique opportunity for L&T's realty business. The complete recovery of the commercial segment is however, expected to take a longer time due to multiple factors.

Major Achievements

- Launched a premium project 'Elixir Reserve' in Powai
- Successful launch of 'Veridian', a new phase in the flagship Powai development
- Launched a new phase 'Olivia' as part of a large maiden township in Bengaluru. The project commands a premium in the micro market
- As the workplace merges with the home, sale of large size units gained momentum. Traction was seen in large format premium units in Crescent Bay, Parel, placing the business amongst the most sold projects in the premium South Mumbai market



24" Class 600 Butterfly Valves. Large quantities supplied ahead of time for refinery expansion project

Outlook

The real estate sector in India is expected to reach USD 1 trillion in market size by 2030 and contribute 13% to the country's GDP by 2025.

The demand for residential properties will continue to surge due to increased urbanisation and rising household incomes. India is among the top 10 price-appreciating housing markets internationally.

Homebuyers' preferences for bigger homes, large, gated communities, better amenities, and attractive pricing will sustain the demand for premium housing.

Retail inflation has an adverse effect on the disposable income of consumers, possibly posing a concern over consumer sentiments for the near future. However, supportive measures from the Government, RBI and the resultant pick-up in end-user demand will keep the momentum going.

Environment, sustainability, and governance are expected to be a path to progress in the Indian real estate industry. Transparency and stakeholder interaction are now becoming increasingly important. Such growing awareness places developers like L&T Realty in a favourable position.

L&T VALVES LIMITED

Overview

L&T Valves (LTVL) is a leader in flow-control solutions. The business leverages sixty years of manufacturing excellence

to serve key sectors such as oil and gas, defence, nuclear & aerospace, power, petrochemicals, chemicals, water, and pharmaceuticals across the globe. LTVL manufactures a wide range of products such as Gate, Globe, Check, Ball, Butterfly, Plug valves and automation solutions. L&T Valves also runs a global after-market business to support its installed base with service and spares needs.

L&T Valves are designed by specialists with deep understanding of various industry requirements, standards and practices, using state-of-the-art design and analysis software. The Company has a series of successful innovations to its credit, including mission-critical solutions for defence and aerospace industries.

The business has a global manufacturing presence with two manufacturing facilities in Tamil Nadu, India which are equipped with state-of-the-art 5-axis machining centres, CNC machines and facilities for critical testing and two facilities in USA and Saudi Arabia. LTVL products deliver safety, reliability, and quality for industries across the world.

Business Environment

The business landscape of FY 2021-22 started with the COVID-19 impact in the first quarter and resumed normalcy by the second quarter. Raw material price increases, supply chain hurdles and high logistics cost dominated the global macro-economic scenario.

The recovery of oil consumption across the globe and pent-up demand revived the pace of capital expenditure and opened up the market for industrial valves. Planned maintenance by customers deferred from previous period offered opportunities to the business. The valves market remains



Nickel Aluminium Bronze Valves for applications



Cryogenic Ball Valves for Liquefied Natural Gas

highly fragmented with the presence of large players as well as SMEs. These local players are very price competitive, in turn affecting the price margins of the entire industry.

The industry is seeing a shift towards sustainable products leading to the creation of a strong demand for Industrial Valves.

Major Achievements

Orders received:

The major orders include supplies to:

- Aramco Marjan Project Order from Cunado Spain
- Berri Project Order from Saipem
- 48" Rich and Lean Gas Project from Gulfar
- Aramco Marjan Package I Order from Mcdermott

Major Product achievements:

During the year, the business through its technical expertise customised the products and met customers' requirements:

- Metal seated trunnion mounted ball valves for high temperature service
- Large size triple offset butterfly valves
- Gate and check valves with Inconel 625 overlay for sour service
- Triple offset butterfly valves for cryogenic service
- High pressure flex wedge and parallel slide gate valves in F92 material for power industry
- Welded body buried service ball valves for city gas projects

Major Product developments:

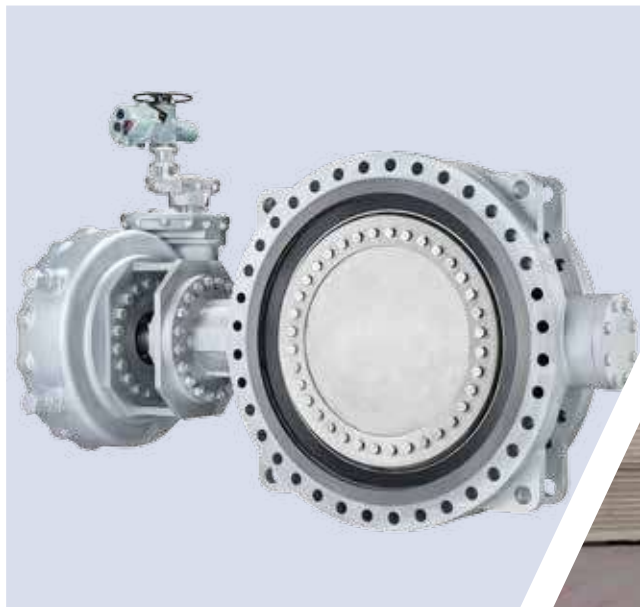
In line with changing market requirements in areas of safety, emission standards in energy, the business made following product developments:

- Hull ventilation flap valves for submarine service
- Globe control valves in F92 material for start-up vent services in power plants
- Bellow seals gate valves for nuclear power and sodium service
- Soft-seated gate and check valves
- Large-size butterfly valves for refineries

Approval / Certifications:

The business made significant efforts to improve its approvals and certifications and gained fresh approvals in the following areas to enhance its market area and customer base.

- API Spec Q1 & API 600, API 594, API 6D, API 609, API 603 Monogram Certification for Coimbatore & Kancheepuram facility
- Safety Integrity level (SIL) Certification – Gate, Ball, TMBV, TOBFV & Globe by TUV Nord & Exida
- Customer Audits by Air Products, Man Energy Solutions, Kuwait National Petroleum, Saudi Aramco, GE power, SASO, NTPC, Black & Veatch, Vogt Power, Thermax, Chiyoda Corporation & NAMC, etc.



Triple-offset Butterfly Valves for Refineries and Process Applications



Large-size high pressure valve for Hydrogen project Applications

Significant Initiatives

- Robust internal quality standards enabled the Company to become the first Indian manufacturer to comply to the stringent specifications of The International Association of Oil & Gas Producers (IOGP)
- Efforts towards foundry vendor base rationalisation (from 57 foundries to 29 foundries) leading to better buying costs and terms, better supply quality and reliability
- Initiative to vertically integrate machine shop to foundry (six suppliers) improved supply chain visibility and performance as well as reduced the lead time for execution significantly
- The Company prioritised the spending on improving the infrastructure by constructing a central kitting store and continuing to do shopfloor layout modifications to improve the lean flow of material
- The Company secured the Authorised Economic Operator (Tier 2) certification from the Government of India, Ministry of Finance, Central Board of Indirect Taxes and Customs, which is a key step to enhancing the logistics speed and customer satisfaction
- Focus on automation of repetitive business processes by adapting RPA&AI / ML technologies has enabled substantial improvement in productivity and reducing overheads

Outlook

Crude oil prices, capacity additions, geopolitical scenarios, liquidity, project capex spending and GDP trends in the relevant geographies continue to be the key demand drivers impacting order prospects.

The market remains highly fragmented with intensified competition rising from the changing market dynamics. Raw material and logistics costs remain as major challenges for the Company in the FY 2022-23. But with improved on time delivery and quality products supported by a good mix of direct and distribution customers, the Company is confident of improving its Order Book.

The business has also taken stock of advancements in renewables and energy sector in general. The Company is actively engaged in challenging assignments to create new products for the arising needs in clean energy and other associated sectors. The diverse portfolio in terms of geography and industries, continuous new product development, range extension is expected to be an advantage for the business in the years to come.

With streamlined product basket building, initiatives on geographical expansion, resilient supply chain, digitalisation and a strengthened aftermarket team would help the business gain market share and build a strong Order Book in the coming year and deliver highest level of customer satisfaction.

The business with major linkages to the fortunes of the oil & gas segment plans to increase their focus on growing segments such as Water, LNG, Hydrogen and in other cryogenic application segments which are expected to grow in the coming year as it has suitable products available for the mentioned segments. Cryogenics and Water sector is expected to witness considerable growth in the coming years enabling positive outlook for valves business.



Komatsu PC300-8 Hydraulic Excavator with Breaker attachment

With COVID-19 behind, revival of the oil prices, stable customer enquiries, buoyancy in the non-oil sectors like water, pharma, power, and focussed actions taken by LTVL, the outlook of the business remains positive.

CONSTRUCTION EQUIPMENT & OTHERS

Overview

The Construction Equipment & Others (CE&O) business includes the manufacture and marketing of construction equipment, mining equipment and equipment for tyre manufacturing industry, broadly segregated into Construction & Mining Machinery (CMM) and Rubber Processing Machinery (RPM).

The CMM division is engaged in the business of distribution and after-sales service for hydraulic excavators and dump trucks manufactured by Komatsu India Private Limited (KIPL) and other mining and construction equipment manufactured by Komatsu worldwide. It also handles the distribution and after-sales support for a range of construction equipment including wheel loaders, compactors and hydraulic excavators manufactured by L&T Construction Equipment Limited (LTCEL) and Mining Tipper Trucks manufactured by Scania India. In addition, the division handles distribution and after-sales support for the mining equipment manufactured by L&T's Minerals & Metals SBG viz. surface miners, sand plants, crushing solutions and apron feeders. The CMM

division completed 75 years of business during FY 2021-22 and celebrated the same through the release of a corporate stamp, among other initiatives.

LTCEL, located in Doddaballapura, near Bengaluru, manufactures vibratory compactors, wheel loaders, hydraulic excavators, asphalt paver finishers, pneumatic tyred rollers, skid steer loaders, hydraulic power packs, cylinders, pumps and other components. During the year, LTCEL played a significant role in the process of development and manufacture of the girder transporter and straddle carrier for the Mumbai-Ahmedabad High-Speed Rail project.

The RPM division, located in Kancheepuram near Chennai, is engaged in building machines and tyre automation systems for the global tyre industry. RPM established as a JV in 1972 for manufacturing tyre curing presses and became a fully-owned business unit of L&T in 1995. The manufacturing facility located in Kancheepuram, India caters to the machinery requirements of the tyre industry and has supplied equipment to tyre majors in over 46 countries across the globe. The division also supports certain customers in the tyre industry with 'build to print' products and customised machinery development as well. RPM business is also celebrating a significant milestone in FY 2022-23 with its 50th anniversary.

The Product Development Centre (PDC), based at Coimbatore, with its highly-skilled design team, renders engineering and product development support for CMM and RPM businesses.



L&T 1190 Soil Compactor

Business Environment

Construction & Mining Machinery Business (CMM)

Investment in the construction and mining sectors is one of the key demand drivers of the CMM business.

During the year, highway construction activity increased as compared to the previous year as the overall contract awarding activity improved in this period. However, elections in five states resulted in subdued growth in Q4.

The demand for mining / material handling equipment also improved on the basis of higher production of coal, iron-ore and other non-ferrous metals.

The market size for premium excavators grew by 9% in FY 2021-22 with L&T / KIPL's market share increasing to 31% from 30% in the previous year. The market demand for wheel loaders and vibratory compactors remained stable at about 6,000 with L&T / LTCEL maintaining its market share at 12% in FY 2021-22.

However, the demand opportunities for construction and mining equipment to some extent, got constrained due to stiff competition from domestic and Chinese equipment manufacturers.

Rubber Processing Machinery Business (RPM)

The demand for the rubber processing machinery manufactured by this division depends on the capital investments by the tyre majors, which is in turn linked to the growth forecast for the Automobile, Agricultural and Mining sectors.

The first half of the year witnessed good recovery for the tyre industry with pick-up in economic activity and demand for vehicles. However, due to the effect of the Omicron-led 3rd wave, passenger car tyre demand remained muted for the second half of the year. Marginal growth was seen in the truck and bus market in Europe and North America. The growing infrastructure activities in both developed and developing countries, combined with increased agricultural and mining activities, has been providing a boost to the tyre sales in select segments.

The Indian tyre industry reached a turnover of about USD 7.8 Bn in 2021. The tyre demand has witnessed an overall healthy recovery of 19% - 20% in the last 9 months. The recovery has been supported by a robust growth in the after-market replacement segment as well as the OEM tyre segment that has grown in the backdrop of higher vehicle sales. Also, the recovery in the domestic demand and growth in exports has resulted in overall better capacity utilisation for the overall industry. Nevertheless, the Indian tyre industry is facing significant headwinds in the form of a sharp rise in raw material prices, particularly for natural rubber and crude-linked imports such as synthetic rubber, carbon black, and other inputs.

FY 2021-22 witnessed significant investments from the tyre majors both in domestic segment and international segment, especially in the Americas. The tyre manufacturers are mostly operating at their peak capacity and looking at expansion opportunities. The Truck & Bus, Agri and Off-the-Road segment continue to remain profitable and a focus area for the tyre makers due to increased agricultural, mining and construction activity. The investments in 2-wheeler and passenger car segments were only incremental.



Komatsu HD785-7 Dump Trucks

Major Achievements

Construction & Mining Machinery Business (CMM)

- Won the largest single order ever in this year for supply of mining equipment with a maintenance contract for a period of 10 years
- Supplied 7000th PC71 and 2000th PC210-10M0 hydraulic excavators from KIPL and 1500th L&T vibratory compactor from LTCEL
- Highest ever dump truck sales of 135+ machines in a year
- Commissioned L&T's largest skid plant (3 x 1500 TPH) in Ambey Mine, Rajmahal Coal Mines

Rubber Processing Machinery Business (RPM)

- Received a breakthrough order for the supply of first ever passenger car hydraulic tyre curing presses to USA
- Received the largest order from a Japanese tyre manufacturer for their green field project in India
- LTRPM received the US patent for the design of Mould-height adjustment for its new generation hydraulic curing press
- Successfully engineered and executed Truck Bus Radial (TBR) Presses – Side Frame type – 3rd Generation Press with about 7.5% weight reduction in structures. The press offers unique features of energy efficiency with savings of 30% in steam consumption over earlier type of presses
- Reduced floor time for Truck Bus Radial (TBR) & Passenger Car Radial (PCR) presses by 40% thereby increasing assembly throughput

Product Development Centre (PDC)

- PDC along with LTCEL worked on certain construction equipment and road machinery of LTCEL to successfully

migrate them to a new engine platform conforming to CEV IV emission norms and meet the new safety regulations

- PDC along with LTCEL developed various attachments during the year such as Rock Splitter, Bottom Dump Attachment for L&T 300i, Clam Shell, Mass Excavation Bucket and Super Long Front for the 100T Class excavators
- PDC along with RPM worked on several new development and improvement projects related to Tyre Curing Presses and Tyre Building Machine (TBM) for supply to some of the marquee customers of RPM. It is noteworthy to mention that PDC was also awarded 2 patents related to the RPM business in this year

Significant Initiatives

Construction & Mining Machinery Business (CMM)

- Suraksha 10000 plus programme launched to cover PC210-10M0 excavator by extending the warranty service coverage to 5 years / 12,500 hours
- Inauguration of KOWA (Komatsu Oil Wear Analysis) lab in Nagpur for oil analysis to help in ascertaining the machine condition
- Both KIPL and L&T extended the warranty period by 2 months on the equipment supplied in view of the low utilisation of machines during the COVID-19 period
- Launched L&T Genuine Lubricants along with Gulf Oil for LTCEL equipment
- Introduction of KGO (Komatsu Genuine Oil) lube dedicated van for promotion of genuine oils from Komatsu to expand sales and market share
- Introduction of new variant of PC205 20T hydraulic excavator to cater to general construction and hiring segment



Passenger Car Floor Mounted Hydraulic Tyre Curing Press Smart Kiosk installed at Pimpri-Chinchwad

- Introduction of PC500 50T hydraulic excavator for use by private coal OB (Overburden removal) contractors

Rubber Processing Machinery Business (RPM)

- Evolved 19 design projects through 'Technology Centre Initiatives' and implemented 9 initiatives for design improvements
- Created vendor fabrication facility adjacent to the plant, to cater to 150 MT / Month of fabrication load to address the shortfall of in-house capacity
- Successfully implemented modular assembly and testing methodology for TBR presses
- Successfully developed supplier base for machining of heavy structures like top / bottom structures, side frames, guide columns, lock ring etc. to meet the increased business requirements in Hydraulic Tyre Curing Press (HTCP) segment

Outlook

Construction & Mining Machinery Business (CMM)

With the Government's thrust on investment in infrastructure construction activity expected to pick up pace during the coming year, the construction equipment market is expected to grow by 17%.

Government initiatives in infrastructure development in roads, railways, irrigation, ports, urban and rural infrastructure, affordable housing, etc., are expected to drive demand in the cement and metal sectors, which in turn will boost demand for excavators, dump trucks, dozers and other road construction and mining equipment. With ~65% of demand for mining equipment coming from coal PSUs, business is planning to target selective tenders along with Komatsu. Business plans to strengthen its position in the premium segment by increasing its focus on large contractors,

large irrigation projects and coal OB (Overburden removal) contractors.

Rubber Processing Machinery Business (RPM)

The global tyre demand is likely to be robust and tyre companies are poised for investments in select segments. The global tyre market size is estimated to be worth USD 146 Bn in 2022 and is forecast to a readjusted size of USD 192 Bn by 2028 with a CAGR of 4.7% during this period. The domestic tyre market is expected to be very buoyant especially in sectors like Agri, Mining and Truck & Bus. As per ICRA, the Indian automobile sales volume is expected to grow by 5-9% y-o-y in FY 2022-23.

Electric car sales will be a growth pole for the industry, with new electric products coming to market. Also, electric vehicles are expected to see strong adoption in the coming years, with 2-wheelers and 3-wheelers leading the way.

The business has an added advantage as compared to the European competitors, due to its wide product range across all segments and being a market leader in machinery for Off-the-Road in Agri and Mining sectors which will aid the growth in coming years.

SMART WORLD & COMMUNICATION

Overview

The global adoption of technology for smarter, secure, intelligent solutions, efficiency improvement and optimisation are not only having a profound impact on how technology is being used in our daily lives but also has opened a multitude of business opportunities.



Integrated Command Control Centre, Jhansi

The Smart World & Communication business unit has been leveraging the latest technological innovations in Utilities, Communication, Cybersecurity and IoT areas to benefit society at large. The business provides end-to-end solutions / services in the system development of Smart Cities, NextGen Communication & Military Communication.

The business over the years has gathered prolific experience as a leading systems integrator (MSI) through roll out of domain centric projects, developing 25+ Safe & Smart Cities, providing digital connectivity to 13 states, integrating more than 1.25 lakh IoT Devices, 30+ Data Centers and various defence communication projects.

Leveraging the experience garnered across years, the business has embarked on a transformational journey of establishing itself as a Global Smart Solutions & Services Leader for Smart Cities and in NextGen Communication technologies.

L&T's Smart World & Communication business has always endeavoured to keep pace with the ongoing advancements in the technology landscape with a diversified team of 700+ skilled professionals, the business is continuously keeping abreast with technology trends like Cloud Computing, IoT (Internet of Things), AI, Mobility, Drone Technology, LEO Satellites, 5G, Cyber security etc. The business operates in 3 major segments:

Safe & Smart Infrastructure – Systems and solutions for Safe Cities, Smart Cities, Public Safety, Critical Infra Security, Traffic Management Solutions, Integrated Command Control Centres, Advanced Metering Solutions and Smart Utilities.

Communication & Telecom Infrastructure – Systems and solutions for Network Design, Engineering & Rollouts, Network Migration & Upgradation, NextGen Data Centers, Private Cloud, Cyber Security with focus on IT / OT Security,

Cloud Security, LTE, Virtualised Network Technologies, 4G / 5G, TETRA.

Military Communication – Systems and solutions for Satcom and Ground stations, Radio communication System (HF VHF & UHF), Tactical Communication Systems, Software Defined Radios, Electronic Warfare Systems, Vessel Traffic and Coastal Surveillance System.

Business Environment

The opportunity landscape was affected by the 2nd and 3rd wave of the COVID-19 pandemic. Diversion of Government spends resulted in the decline of the addressable market. The progress of certain projects was also impacted as the work-front clearances were delayed due to the restrictions imposed on account of COVID-19.

Overall, the progress under the Smart City Mission has been uneven due to administrative delays and financial constraints with many city corporations / agencies.

Citizen's safety continued to be a Government priority and City Surveillance and Intelligent Transit Management System (ITMS) projects saw movement in few cities like Bengaluru, Chennai, Delhi, etc.

Defence and Space technology got higher budgetary allocations, paving the way for opportunities for Military Communications but faced with slow roll outs.

The BharatNet and Smart Meter programmes saw various deliberations in the operational modality and policies rollout leading to delay in implementation.

The business is moving up the technology value chain with a focus on solution / services-based domain centric



Smart Signalling System at Raipur

Smart Pole at Vishakapatnam

opportunities for more profitable and sustainable pipeline in the focus domains.

Major Achievements

Despite challenges posed by COVID-19 on the market opportunities, the business was able to secure multiple critical jobs such as:

- **Patna Smart City** - Integrated Command and Control Center (ICCC Smart City Platform) and implementation of city surveillance, ITMS and smart solutions and analytics
- **Moradabad Smart City** for creation of Command-and-Control Centre (CCC), CCTV Surveillance, Smart Traffic Solution, and Integration of various ICT components
- **Ahmedabad Safe City Project** - Integrated Command & Control Center, City Surveillance System and Video Analytics solutions for citizen safety
- **Integrated Mobile Shelters** for Armed Forces for Advanced Systems Laboratory of DRDO
- Breakthrough orders in areas of solutions / services and from private sector with solutions order received from Telangana, orders in Operational Technology and Cyber security from industrial segments, order for setting up of Security Operation Centre, etc
- The business also successfully demonstrated its capability in the 5G domain with the successful deployment of use case leveraging IoT, Video AI riding on 5G network in the areas of public safety and smart & connected health
- Additionally, the business also carried out the proof of concept for private Long Term Evolution at L&T's A M Naik Heavy Engineering Complex Hazira in Surat

- The Communications segment successfully launched the in-house developed Network Management System that can effectively monitor the IT and Non-IT Infra simultaneously in a project
- The business has signed transfer of technology with Centre for Development of Advanced Computing (CDAC) for Cyber Security- DLM using blockchain and Centre for Artificial Intelligence & Robotics (CAIR) DRDO for Secured Handset

Projects commissioned:

- Successful soft launch of Moradabad Smart City Project Integrated Command Control Centre ahead of schedule
- Commissioning of 9.3 meter Earth Satellite Antenna System for Integrated Test Range for DRDO
- Cyberabad & Rachakonda ITMS for Cyberabad & Rachakonda Commissionerate
- Telecom system for R2 section of Bengaluru Metro flagged off
- Facility Acceptance test for Jharkhand Statewide Area Network Project successfully completed

Outlook

Rapid urbanisation is driving the use of technology to solve complex city problems globally. Smart Cities expansion to remaining Tier 2 & Tier 3 cities is expected. Public Safety (City Surveillance) and better commute experience (ITMS) in cities are being prioritised by the Government. The Smart Meter National Program in India aims to connect Smart Meters at 250 Mn households by 2025. Similar to the Advanced Metering for Energy utilities, opportunities pertaining to IoT solutions for Water Utilities is also expected to gain traction



L&T EduTech - Building Value for Learners, Academia and Industry

in the coming financial year. Under the Jal Jeevan Mission, sensor-based IoT devices play a crucial role in providing safe quality of water and restrict pilferage.

The rising security concerns and emergency service are leveraging the perimeter security and quick response system against any external threat, thus giving a boost to the perimeter security market for Government and private sector establishments such as ports, seaports, defence, industries, factories etc.

The BharatNet program to provide digital connectivity to gram panchayats across the country has been targeted for completion by 2025.

Special initiatives for Data Center & Cloud Modernisation and IT Refresh are being implemented by Government and Private sector. The growing penetration of digital models across a wide range of businesses offers a massive opportunity in this Data Centre & Cloud ecosystem.

Driven by the need for high-speed and secured wireless network, the private LTE market size is experiencing an accelerated adoption across industries and in an exponential year on year market growth, creating opportunities for the business in the areas of adoption of private LTE across industries.

The Cyber Security market continues to provide exceptional opportunities for solution providers. With the increasing threats and IT & OT convergence Cyber Security solutions have received a push in the Private as well as Government sectors. 5G is critical to cater to the future needs of digitalisation and for developing digital solutions for businesses across the globe, which will create opportunities for efficiency enhancements and new revenue streams. 5G spectrum allocation is expected to be fast-tracked and the rollouts are expected to be implemented in the near future.

The latest Spacecom policy has opened doors for private companies to participate in the domain. Growing application of Satellites for Surveillance, Defence & Remote connectivity through Satellite broadband (LEO / MEO sats.) has opened up new avenues in the space domain for ground stations.

The Smart World & Communication business with its experience and expertise is well positioned to ride on the wave of digitalisation and digital connectivity and convert the prospects to project wins.

DIGITAL BUSINESSES

'Others' also includes the new age businesses incubated by the Company. 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

Technology has led to massive disruption in the education industry. World-class education is now available online and is expected to complement the physical classroom learning. Hybrid / blended learning is here to stay and has made education equitable, accessible and affordable.

L&T, with its rich experience in engineering, is well placed to develop industry led, application-oriented content, bridging the industry-academia gap. L&T's courses are developed based on its inherent expertise and strengths in core engineering, manufacturing, technology and its efforts in digitalisation, and not just an aggregation of the existing resources.

L&T EduTech is a business formed to offer EdTech products and solutions to educational institutions, skilling bodies, working



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

professionals, students, and learners across segments using a technology intensive user-friendly platform. The business commercially launched on October 15, 2021 intends to further fine-tune the product over time. The offerings include technical courses for colleges covering a wide stream of subjects like Civil, Mechanical, Electrical & Electronics, IT, Chemical, etc. It also offers Vocational & Skilling programmes for increasing employability and Upskilling and Assessments for evaluating as is skills for measuring employability and for competency mapping.

There are four broad categories in EdTech Industry and out of the four segments, L&T has decided to enter Higher Education and Professional skilling. To address the issue of equity, access and opportunity, University Grants Commission has recently doubled the academic credit limit for online courses to 40%, which positively supports the business. 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 of India. All these aspects create a positive outlook for the business.

L&T SuFin

In India, a number of B2C e-commerce platforms are well established and operating at scale. In comparison, the B2B e-commerce for industrial and construction products is at a nascent stage and just beginning to emerge with a few players operating in some segments of industry.

L&T, with its presence across multiple industrial and infrastructure sectors, has deep knowledge of a large number of construction and industrial products and associated supply chain nuances. L&T also has rich experience in dealing with thousands of SMEs over the years, and thereby understanding their problems and impediments to growth. Further, L&T's

experience with SMEs and with the products, provides an opportunity to create trust between buyers and sellers on the platform. Leveraging its strong brand salience, understanding of the products and leadership position, L&T is well placed to enter and service the B2B e-commerce segment.

L&T SuFin is a B2B industrial products ecosystem which has been commercially launched in March 2022, providing a platform for SME / MSME buyers and sellers to connect in an efficient 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 business platform offers a wide product range in industrial supplies & consumables, building & construction materials, electrical & electronics equipment, machinery tools & mechanical equipment and packaging, printing & office supplies.

The logistics partners on the platform would enable efficient delivery and fulfilment in a timely, cost-effective manner with strong service level agreement compliance. In this B2B marketplace initiative, financial services companies will also participate on the platform by providing attractive financing options to the registered users.

The revenue for the platform is generated in a hybrid manner through subscription fees, advertising, product listing, etc. and through transactions fee by charging a commission for transacting on the platform. In addition, there are financing fees, and logistics fees collected from the entities for using the services.

With digitalisation making inroads into all business segments, e-commerce is slated to grow exponentially and in this positive environment, L&T SuFin brings choice and convenience in a single and completely reliable package.