

**TATA ELXSI**

## TATA ELXSI

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## Summary

Company: Tata Elxsi	Industry: IT and Software
Promoter/Promoter group:	Tata Sons and its Affiliates
Promoter/Promoter group shareholding	43.92%
Percentage of promoters' shares pledged	N/A
BSE/NSE Scrip Name	NSE: TATAELXSI

## Stock Performance Summary

Current Price ( <b>Date</b> )	₹6940.80 (8th November, 2024)
Face Value	₹10
52 weeks High / Low:	₹9,200 / ₹6,411.2
Total Traded Volumes:	126,103
Market Cap: Rs.	₹43,228 Cr
Sector:	Software
EPS (FY2024):	127.21
P/E (TTM):	52.92
Dividend yield	1.01%

## Credit information

External Rating (agency name)	Crisil Ltd.
Rating date	AA (Stable)
Rating Migration history	From AA- (stable) to AA (stable)
Rating Migration date	March 31, 2023

## INVESTMENT ANALYSIS

### Strengths

1. **Diverse Industry Presence and Technological Focus:** Tata Elxsi has a strong presence across automotive, healthcare, media, and communications sectors, leveraging emerging technologies like AI, IoT, and cloud computing to provide innovative solutions.
2. **High Revenue Growth in Key Segments:** The company's Embedded Product Design (EPD) and Software Development & Services (SDS) segments, particularly in automotive and healthcare, drive a significant portion of its revenue.
3. **Global Footprint and Diversification:** Operations in key global markets (North America, Europe, Asia-Pacific) reduce geographic risk and contribute to a stable revenue base.
4. **Strong Financials and Profit Margins:** Tata Elxsi maintains a solid EBITDA margin and demonstrates consistent profit growth, which, along with regular dividend payouts, shows effective capital management and shareholder commitment.
5. **Strategic Partnerships and Innovation:** Collaborations with companies like Qualcomm and BrainChip strengthen Tata Elxsi's market position by enhancing its R&D capabilities and expanding its service offerings.

### Weaknesses

1. **Revenue Concentration in Automotive Sector:** Despite diversifying, a large portion of Tata Elxsi's revenue depends on the automotive industry, making it vulnerable to market cycles and demand fluctuations in that sector.
2. **High Operating Costs and Employee Expenses:** Rising employee and operational costs pose a challenge for sustaining high profit margins, particularly in a competitive IT talent market.
3. **Valuation Pressures and Market Expectations:** Tata Elxsi's high valuation indicates strong

market expectations; any slowdown in growth or innovation could lead to valuation corrections.

4. **Customer and Supplier Dependency Risks:** The company's reliance on major clients and advanced technology suppliers could expose it to bargaining power imbalances and supply chain disruptions.
5. **Foreign Exchange Exposure:** With a significant portion of revenue coming from international markets, Tata Elxsi faces foreign exchange risks that can impact its financial stability if not managed effectively.

### **Financial Health and Future Prospects**

Tata Elxsi exhibits a strong financial position with no debt, steady revenue growth, and high-profit margins. Recent revenue growth (13% YoY) and expanding global presence, especially in high-growth markets, show its robust growth trajectory. However, its valuation suggests that future stock performance may be sensitive to any dips in growth or market changes in its major sectors.

### **Investment Recommendation and Assumptions:**

Tata Elxsi is a well-established player in the technology and engineering services industry with a proven track record of profitability, strong growth, and market leadership in niche segments like design, embedded systems, and digital engineering. While the company's fundamentals are robust, including a debt-free balance sheet, high margins, and diversified vertical exposure, we recommend a **HOLD** rating due to its premium valuation and some concentration risks associated with client dependency. The current valuation of the stock appears to be stretched, trading at 17.4 times its book value, which reflects an overvaluation that could limit upside potential in the near term. Nonetheless, the company's strong

fundamentals, strategic deal wins, and stable cash flow generation could support a HOLD stance for long-term investors.

## **Assumptions Behind the Recommendation**

### **1. Valuation Concerns**

- **Premium Valuation:** Tata Elxsi's stock is currently trading at a high valuation of 17.4 times its book value. Despite the company's strong fundamentals, this premium valuation suggests limited room for price appreciation, especially in the context of moderating growth rates.
- **Market Correction Potential:** Given the high valuation, we assume the stock could be subject to a market correction, aligning its valuation more closely with peers. However, due to its strong financial metrics, any correction could be moderate rather than drastic.

### **2. Revenue and Growth Outlook**

- **Client Concentration Risk:** Tata Elxsi's growth is heavily reliant on a few large clients, notably Jaguar Land Rover (JLR), which contributed 18% of FY24 revenue. We assume that client concentration could pose a risk if there are slowdowns or contract renewals issues with these key clients.
- **Transportation Vertical Resilience:** Despite industry-wide slowdowns, Tata Elxsi is expected to sustain healthy growth in the transportation segment, particularly within the OEM sub-segment, driven by a new \$50 million deal with a European automotive client. We assume this deal will boost revenue over the next five years, reinforcing its position in the automotive domain.
- **Healthcare Vertical Scaling:** Recent wins in the healthcare segment, including partnerships with

a global renal care leader and a US-based health-tech AI company, are expected to contribute to revenue growth. However, we assume these will take several quarters to ramp up to significant levels.

### 3. Margin Sustainability

- **Strong Margins:** Tata Elxsi has maintained industry-leading EBITDA margins in the 29-31% range, indicating efficient operations and strong cash flow generation. We assume these margins will remain stable due to the company's high-value service offerings and operational efficiencies.
- **Cost Management:** Given the company's focus on innovation and digital engineering, we assume ongoing investments in R&D and technology infrastructure will be managed effectively, without significant erosion of margins.

### 4. Key Risks

- **Top 5 Client Concentration:** High dependency on its top 5 clients could expose Tata Elxsi to revenue volatility if there are any shifts in client strategy or budget cuts. We assume this concentration risk remains a significant downside factor.
- **Slow Recovery in Media & Communication:** The Media and Communication segments have shown slower recovery, which could impact overall growth if this trend persists. We assume a gradual improvement in these segments, but any delays could pose a downside risk.
- **Macroeconomic Factors:** Potential economic downturns in key markets (e.g., Europe, North America) could impact client spending on digital and engineering services, affecting Tata Elxsi's growth prospects.

## 5. Upside Potential

- **New Deal Wins:** Faster-than-expected ramp-ups of large deals, especially in the transportation and healthcare verticals, could drive upside surprises. We assume a conservative timeline for these wins to materialize in revenue growth, but early successes could lead to an upward revision of growth estimates.
- **Strong Profit Growth and ROE:** The company has delivered a 22.4% CAGR in profit over the last five years, with a solid ROE of 37.4% over the past three years. We assume that Tata Elxsi will maintain its growth trajectory, supported by robust cash flows and efficient capital allocation.
- **Dividend Payout:** Tata Elxsi has consistently maintained a healthy dividend payout, providing steady returns to shareholders. We assume this trend will continue, contributing to the overall attractiveness of the stock for income-focused investors.

## COMPANY BACKGROUND

**Tata Elxsi Limited** is a prominent member of the Tata Group, stands as a global leader in design and technology services, with a specialization in product engineering across various sectors, including Automotive, Media, Communications, and Healthcare. They aim to create new opportunities that enhance customer experience and drive growth. They emphasize on fostering innovation in the rapidly evolving IT market and accelerating the adoption of cutting-edge technologies. Founded in 1989, Tata Elxsi harnesses advanced technologies such as IoT, AI, and cloud computing to improve their product offerings and operational efficiencies for clients around the globe. With a presence in over 15 countries, the company combines extensive domain expertise with decades of experience, positioning itself as a key player in digital transformation and next-generation technology solutions.

Tata Elxsi structures its operations into specialized business products and services to provide a broad range of services across industries. The company's primary segments include Software Development & Services (SDS), System Integration and Support (SIS) - Industrial Design & Visualization (IDV), and Embedded Product Design (EPD). Each of these segments is strategically designed to provide clients with end-to-end solutions in product design, engineering, and digital transformation. Software Development & Services (SDS)

This segment offers end-to-end solutions across Transportation, Media & Communication, and Healthcare & Life Sciences. SDS brings together technology consulting, product development, and design-led engineering services, supporting clients from ideation through market introduction. Core services include consumer research, branding, graphics, product design, and embedded product development.

## **Software Development & Services (SDS)**

The Software Development & Services (SDS) segment is a combination of the company's former Embedded Product Design (EPD) and Industrial Design and Visualization (IDV) revenues.

### **Key Expertise in SDS:**

- **Transportation Business Unit:** Offers automotive software engineering, vehicle systems engineering, connected car solutions, and electrification. Tata Elxsi supports the shift to Software-Defined Vehicle Platforms and Electric Vehicles (EV) through testing and development frameworks.
- **Healthcare & Life Sciences:** Provides solutions in device development, digital therapeutics, product engineering, regulatory services, and digital transformation. It helps healthcare companies navigate regulatory compliance while innovating medical and healthcare devices.
- **Media & Communication:** Includes commercial RDK Deployments, Android TV Services, OTT services, video analytics, and DevOps automation for video quality. Tata Elxsi supports media companies in creating high-quality digital content and improving consumer engagement through advanced analytics and automation.

## **System Integration and Support (SIS)**

The System Integration and Support (SIS) segment provides specialized solutions for system integration in Experience Centers, Training & Safety Applications, and Design Visualization.

### **Core Offerings in SIS:**

- **Experience Centers and Training & Safety Applications:** These include designing and

implementing simulation environments for safety training and product showcases. Experience centers help clients display complex products interactively, especially valuable for the automotive and healthcare industries.

- **DevOps Security & Cloud Managed Services:** Tata Elxsi offers services in cloud migration, managed infrastructure, network security, and DevOps security, ensuring safe, scalable digital transformations for clients.

### **Industrial Design & Visualization (IDV)**

The **Industrial Design & Visualization (IDV)** segment focuses on product design and enhancing consumer experiences. It combines design research, strategy, branding, and visualization, supporting clients in making products that are both functionally and visually appealing. IDV is particularly influential in consumer electronics, automotive, and healthcare industries where aesthetics and user experience are critical.

- **Design Strategy & Consumer Research:** Tata Elxsi conducts consumer research to inform strategic decisions, identifying trends and user preferences that guide product development.
- **Branding and Product Design:** Through visual branding, graphic design, and product aesthetics, IDV helps clients enhance their brand identity and consumer appeal.
- **Visualization and Simulation:** Tata Elxsi uses 3D modeling, simulation, and virtual prototyping to help clients visualize product designs before manufacturing. This not only speeds up the design process but also improves cost efficiency by reducing the need for physical prototypes.

IDV is instrumental in creating a cohesive brand and product experience. By combining strategy, design, and visualization, Tata Elxsi helps clients develop products that resonate with consumers and strengthen brand loyalty.

## **Embedded Product Design (EPD)**

**Embedded Product Design (EPD)** is central to Tata Elxsi's technical offerings, especially in automotive, healthcare, media, and telecommunications. The EPD segment provides embedded systems and software solutions essential for advanced technology integration, product innovation, and system reliability.

### **Key Offerings in EPD:**

- **Technology Consulting and New Product Design:** Tata Elxsi's EPD team provides consulting services to help clients navigate complex technological landscapes, aiding in new product design for embedded systems that require robust performance and seamless connectivity.
- **Development and Testing:** Tata Elxsi supports the full lifecycle of product development, from initial design to rigorous testing. This includes hardware and software integration, ensuring that products meet both performance standards and regulatory requirements.
- **Specialized Embedded Solutions:** The EPD segment focuses on developing solutions that enhance product functionality and consumer experience. This includes:
  - **Automotive Embedded Systems:** EPD delivers software for automotive applications, including vehicle control systems, infotainment, and advanced driver assistance systems (ADAS).
  - **Connected Devices for IoT:** The EPD team supports the design and development of IoT-enabled devices, making products "smart" by integrating connectivity features.
  - **Medical Device Software:** EPD develops embedded software for medical devices, supporting healthcare clients in adhering to stringent regulatory standards.

## **Business segment-wise**

Embedded Product Design contributes about 86% of the revenue, which caters mainly to Transportation (48.6%), Broadcast & Communication (39.2%) and Healthcare & Medical Devices (8.3%). EPD as a business segment has been growing faster than IDV and SIS, and the overall contribution of EDP to the revenue has grown from 80% to 87% over the last 5 years.

## **Major Clients by Business Segment**

### Industrial Design & Visualization

- **Jaguar Land Rover (JLR):** Collaborates on various design and engineering projects.
- **Comcast:** Engaged in projects related to media and communications.
- **Time Warner Cable:** Works with Tata Elxsi for design and technology solutions.

### Embedded Product Design

- **Qualcomm:** Partnered for embedded systems and hardware design.
- **Broadcom:** Engaged for semiconductor and embedded product development.
- **Tata Motors:** Works with Tata Elxsi for developing embedded solutions in vehicles.

### System Integration and Support

- **Leading Telecom Operators:** Tata Elxsi assists major telecom companies in digital transformation and system integration, enhancing workflow automation and service rollout.
- **Multi-country Telecom Operator:** Selected as a strategic partner for transforming video services across several LATAM countries.
- **Tata Motors:** Involved in extensive automotive engineering projects, including R&D and

product development.

- **Jaguar Land Rover (JLR):** Provides engineering services from architecture to launch phases of vehicle development.
- **OEMs and Suppliers in Automotive:** Collaborates with various original equipment manufacturers for research and development in automotive technologies.

## INDUSTRY ANALYSIS

### 1. Industry

Tata Elxsi operates within the **IT services industry**, focusing on **embedded technology** and **design-led innovation**. This unique positioning enables Tata Elxsi to serve multiple verticals, including **automotive, media, communications, healthcare, and transportation**. By catering to these diverse sectors, the company significantly contributes to their **technological advancements**, providing solutions that enhance the functionality, connectivity, and intelligence of industry-specific systems.

They provide integrated services from research and strategy to electronics and mechanical design, software development, validation and deployment, and are supported by a network of design studios, global development centres and offices worldwide.

As demand for **smart, connected systems** and **automation** increases, Tata Elxsi's **embedded solutions** play a pivotal role in driving progress in areas such as **automotive electronics, smart home technology, and healthcare devices**. The company's expertise in developing these technologies ensures it remains at the forefront of innovation in these sectors.

Elxsi's presence across diverse industries allows it to capitalize on the growing reliance on **advanced digital systems, AI, and IoT**. This strategic involvement across sectors positions the company to benefit from the accelerating integration of digital solutions in modern infrastructure.

### 2. Size and Growth of the Industry

The **Indian IT and IT-enabled Services (ITES) industry** generated over **2 lakh crores in FY2023**, establishing itself as a major growth driver of the Indian economy. The sector has seen steady revenue

growth, particularly since 2022, and is projected to reach **\$350 billion by 2026**, contributing up to **10% of India's GDP**. This expansion reflects the growing demand for digital transformation and IT services across various industries globally.

**Impact:** Tata Elxsi's focus on embedded systems positions it to benefit from the expanding market for cutting-edge solutions in industries like **automotive, healthcare, and communications**. As these sectors increasingly adopt **AI** and **IoT**, the demand for Tata Elxsi's specialized services in connected technologies and automation will likely rise, enabling the company to capture a larger market share.

### **3. Technological Innovations and the Nature of the Industry**

The IT and engineering services industry is highly innovative and rapidly evolving, driven by advancements in **AI, IoT, cloud computing, digital transformation**, and telecommunications. Tata Elxsi's strategic focus on these technologies allows it to develop intelligent, connected products that address the needs of diverse industries, from automotive to healthcare. Here's a breakdown of these key drivers and Tata Elxsi's involvement:

- **AI (Artificial Intelligence):** AI is transforming various sectors through automation, predictive analytics, and intelligent systems. Tata Elxsi leverages AI to create smarter solutions across industries.
  - In the automotive sector, Tata Elxsi's AI-driven autonomous driving solutions allow vehicles to make real-time decisions, recognise objects, process vast amounts of data, and predict road conditions, along with providing driver assistance and vehicle diagnostics.
- **IoT (Internet of Things):** IoT enables the seamless exchange of data across connected

devices, creating smart environments.

- Tata Elxsi designs IoT-enabled products for sectors like healthcare and automotive, such as connected medical devices that send real-time patient data for continuous monitoring or telematics solutions for vehicle diagnostics and safety features in connected cars.
- **Cloud Computing:** Cloud solutions provide scalable, on-demand computing and data storage essential for large data sets and real-time processing.
  - Tata Elxsi uses cloud technology for industries like media and healthcare, allowing seamless content delivery in broadcasting or enabling data storage and remote access in connected healthcare.
- **Digital Transformation:** The integration of digital technologies enhances business operations and customer experience across sectors.
  - Tata Elxsi aids telecom companies in their digital transformation, modernizing infrastructure to support 5G. This integration enables faster data transmission and improved connectivity, critical for high-tech applications like autonomous vehicles and remote healthcare.
- **Next-Generation Telecommunications:** Tata Elxsi plays a critical role in developing **5G**, **6G**, and **O-RAN** technologies, which are essential for high-speed communication and large-scale IoT networks.
  - **5G and 6G:** These technologies revolutionize industries by providing ultra-fast

communication, low latency, and high device connectivity. Tata Elxsi's expertise enables the design of smart applications, autonomous vehicles, and remote medical services powered by high-speed networks.

- **O-RAN (Open Radio Access Networks):** Tata Elxsi's work with O-RAN technology contributes to the flexibility and openness of telecom networks, allowing cost-effective deployment and reducing reliance on proprietary systems.

**Impact:** Tata Elxsi's focus on these technological innovations positions it to capitalize on industry demand for digital, connected, and smart solutions. Its technological expertise across industries enhances operational efficiencies, user experiences, and product intelligence. By offering **end-to-end solutions**, from concept and development to testing and post-deployment support, Tata Elxsi helps clients reduce time-to-market and optimize costs—especially crucial in fast-paced sectors like consumer electronics and automotive technology.

Through **innovation, cross-industry expertise, and scalable, sustainable solutions**, Tata Elxsi remains well-positioned to drive and benefit from the ongoing digital transformation across industries.

#### **4. Industry Growth**

India remains a prominent global hub for IT services, supported by a vast talent pool and cost advantages that make it highly competitive on the world stage. **Growing digitization, 5G deployment, and the rise of AI-driven innovations and connected solutions** across sectors are major growth drivers for the industry, enabling India's IT sector to expand rapidly into cutting-edge areas.

Specific segments like **automotive electronics** and **healthcare technology** are experiencing double-digit growth rates as demand for **smart, automated systems** surges. This industry-wide

momentum has positioned the Indian IT sector as a key growth engine, with revenues expected to reach **\$350 billion by 2026 (according to IBEF.org)**, underscoring the increasing value of digital transformation.

Tata Elxsi's growth is closely tied to its ability to seize these opportunities in high-growth sectors, particularly **transportation** and **healthcare**, where it can deploy advanced **AI** and **IoT** solutions.

**Impact:** With the rapid expansion in areas like automotive electronics and healthcare, Tata Elxsi stands to significantly benefit by expanding its client portfolio and enhancing its service offerings. As demand for intelligent, connected solutions rises, Tata Elxsi is well-positioned to deliver innovative, high-impact technologies that align with the evolving needs of these sectors.

## **5. Contribution to GDP:**

- The IT industry contributes **over 7.5% to India's GDP**. (statista.com)
- This sector also accounts for **51% of India's services exports**, making it a crucial component of the economy.(IBEF)

The IT industry is a cornerstone of India's economy, contributing significantly to both its GDP and services exports, while being closely linked to government policies that shape its growth and operational environment. Here's a detailed explanation of how these aspects are interrelated:

- The IT and IT-enabled Services (ITES) sector is responsible for over 7.5% of India's GDP. This includes software services, product design, and digital transformation initiatives that Tata Elxsi and other companies provide to global clients.

- Moreover, the sector is a key driver of India's services exports, accounting for 51% of total services exports. Indian IT firms, including Tata Elxsi, serve global clients in diverse fields such as automotive, healthcare, telecommunications, and consumer electronics, contributing billions of dollars to the economy annually.
- The industry's success has turned India into a global hub for software development, business process outsourcing (BPO), and digital innovation.

## 6. **Government Policies Supporting Growth**

India's government has implemented several initiatives to accelerate digital transformation, promote domestic innovation, and support the IT industry. Programs like Digital India, Make in India, the Smart Cities Mission, and the ongoing 5G rollout create a favourable environment for companies like Tata Elxsi to expand in areas such as IoT, AI, and cloud solutions.

- **Digital India** aims to transform India into a digitally empowered economy by enhancing digital infrastructure and fostering innovation in AI, cloud computing, and cybersecurity, increasing demand for advanced IT services.
- **Make in India** encourages companies to innovate and manufacture domestically, benefiting sectors like IT product design and engineering services where Tata Elxsi has expertise.
- **Smart Cities Mission** drives demand for tech solutions, including IoT and urban infrastructure digitization, which aligns with Tata Elxsi's work in smart and embedded technologies.

- **5G Rollout** is set to revolutionize communications, stimulating demand for 5G-enabled services across telecommunications, media, and automotive sectors.

Tata Elxsi's focus on IoT, AI, and cloud positions it to benefit directly from these initiatives as India's digital infrastructure expands. These policies foster a robust tech ecosystem that aligns with Tata Elxsi's core capabilities, enabling it to capture growth opportunities in emerging and established industries.

## 7. **Key Players in the Industry:**

- In India, major IT services companies include **TCS, Infosys, Wipro, and HCL**, all of which offer a wide range of IT services across multiple industries.
- Globally, companies like **Accenture, Capgemini, and Cognizant** compete in the **design and product engineering space**, offering services similar to Tata Elxsi in areas such as digital engineering and IT consulting.
- **Tata Elxsi** differentiates itself by specializing in niche verticals such as **automotive, broadcast, and healthcare**. Its strength lies in **design-led innovation**, where it provides highly specialized engineering and technology solutions, particularly in **embedded systems and connected products**.

## 8. **Level of Competition:**

- The **IT services industry** is characterized by **intense competition**, with companies competing based on their **technological capabilities, pricing strategies**, and ability to deliver **innovative, differentiated services**.

- Tata Elxsi, with its **niche focus**, faces **less direct competition** from broader IT companies that cover multiple industries. However, it operates in the highly competitive global market for **embedded systems and product design**, where firms from **Europe, North America**, and increasingly, **China** are strong rivals.
- Despite its niche, Tata Elxsi must continually innovate and maintain a competitive edge in **product engineering, AI**, and **connected technology** to compete against these global players

## 9. Key Revenue Drivers

Tata Elxsi's growth is underpinned by several key revenue drivers that reflect the company's strategic focus and market dynamics:

- **Transportation Sector Growth**: The transportation segment has demonstrated significant growth, with an 8.8% quarter-on-quarter increase in Q2 FY25. This surge is primarily driven by large contracts in software-defined vehicles (SDVs) and advanced driver-assistance systems (ADAS), highlighting Tata Elxsi's pivotal role in the evolving automotive landscape.
- **Geographic Expansion**: Tata Elxsi's strategic expansion into diverse markets, particularly Japan and other emerging economies, has resulted in substantial revenue growth. The company reported a 31.2% year-on-year increase in revenue from India and an impressive 81.9% growth in Japan and emerging markets. This geographic diversification not only broadens its client base but also mitigates risks associated with dependence on a single market.
- **Technological Innovations**: The company's emphasis on digital transformation and the integration of AI technologies into its offerings enhance its competitive advantage. By leveraging

advanced technologies, Tata Elxsi attracts new clients while also retaining existing ones, ensuring continued relevance in a rapidly changing market.

**Impact:** Continued investment in cutting-edge technologies and the expansion of its global footprint position Tata Elxsi for steady revenue growth, particularly in high-demand sectors like transportation and healthcare. This proactive approach to adopting innovations and entering new markets will likely sustain its competitive edge and financial performance in the years to come.

## **10. Key Cost Drivers and Challenges**

Tata Elxsi faces several key cost drivers that influence its financial performance and operational efficiency:

- **Operational Costs:** Total expenses for Tata Elxsi have risen significantly, with increases of 30% year-on-year in FY2022, 29% in FY2023, and 15% in FY2024. This trend indicates a pressing concern regarding rising operational expenses, particularly salary costs driven by competition for skilled talent. Such increases may put pressure on profit margins and require effective management to maintain financial health.
- **R&D Investments:** The company allocates substantial resources to research and development, particularly in emerging technologies like IoT and AI. While these investments are critical for sustaining innovation leadership and enhancing competitive advantage, they also contribute to higher operational costs. Balancing R&D expenditure with profitability will be vital for long-term success.
- **Market Competition:** In a competitive landscape, Tata Elxsi must allocate increased resources to marketing and customer acquisition to maintain its market position against

rivals. This is particularly important in global markets, where competitors may possess larger budgets and more extensive reach, further intensifying the need for effective cost management.

**Impact:** While investments in R&D and operational costs are essential for driving innovation and growth, they present challenges to maintaining profitability. To sustain its growth trajectory, Tata Elxsi will need to implement efficient cost management strategies that optimize expenditures while continuing to invest in key areas that enhance its competitive position.

## **11. Demand-Supply Scenario**

**Past Trends:** In recent years, Tata Elxsi has navigated a varied demand landscape across its segments. The transportation sector has shown robust growth, driven by advancements in automotive technologies, including software-defined vehicles (SDVs) and advanced driver-assistance systems (ADAS). In contrast, the media and communications sector has experienced stagnation, primarily due to macroeconomic factors that have affected spending and investment.

**Future Outlook:** Looking ahead, the demand for SDVs and digital services is projected to rise significantly as the automotive industry continues to evolve. However, challenges remain, particularly in the healthcare sector, where delays in client program renewals could negatively impact overall performance. Addressing these challenges will be crucial for sustaining growth.

**Opportunities in AI and Cloud:** The public cloud services market is anticipated to grow at a compound annual growth rate (CAGR) of 23.4%.(PWC) Tata Elxsi is well-positioned to capitalize on this trend through its cloud-based services and solutions. Additionally, the increasing demand for AI-driven solutions, particularly in the healthcare and automotive sectors, presents significant opportunities for

Tata Elxsi to expand its offerings. Innovations in areas such as AI-based image processing, predictive analytics, and autonomous systems can enhance its service portfolio.

**Export and Global Markets:** Similar to many IT companies in India, Tata Elxsi derives a substantial portion of its revenue from exports, particularly to North America and Europe. The demand for IT services in global markets remains strong, with the sector's exports estimated to reach \$194 billion in FY23. Tata Elxsi's established global presence and diverse clientele in sectors like automotive and broadcast media position it favourably to benefit from this continued growth in IT exports.

Overall, while Tata Elxsi faces certain challenges, the evolving demand in key sectors, coupled with significant opportunities in AI and cloud services, provides a promising outlook for its future growth trajectory.

## **12. Production Capacity Levels and Pricing**

- Tata Elxsi is expanding its production capacity through strategic partnerships and investments in innovation centres, such as the Next-gen Mobility Innovation Center in Bengaluru.
- Pricing strategies will need to adapt based on competition and the value proposition of new technologies offered, especially in high-growth areas like SDVs
- Tata Elxsi holds a significant share in the transportation vertical (approximately 50% of revenue), but it faces challenges from increased competition and market share losses due to a shift towards Tier-1 suppliers.
- Market share stability depends on the company's ability to innovate and effectively manage operational costs while expanding into new markets.

### 13. Porter Analysis

#### 1. Competitive Rivalry

- **Intensity:** Tata Elxsi operates in a highly competitive IT and engineering services industry, particularly within the specialized niche of embedded systems and digital transformation services for automotive, media, healthcare, and communications sectors.
- **Competitors:** The company faces direct competition from both large-scale IT firms like TCS, Infosys, and Wipro, which offer broad services across industries, and niche players like KPIT Technologies in automotive and embedded systems. Given the presence of global firms, Tata Elxsi's specialized focus on embedded systems differentiates it but does not eliminate competition pressures from both Indian and international markets.

#### 2. Threat of New Entrants

- **Barriers to Entry:** The IT services and engineering sector generally has high entry barriers due to the need for specialized knowledge, advanced technology, and a skilled talent pool. Tata Elxsi's design-led innovation and deep technical expertise create a higher barrier for new entrants in its niche markets.
- **Capital Requirements:** Entering the embedded systems and design space is capital-intensive, requiring substantial investments in R&D, technology infrastructure, and compliance with sector-specific regulations. However, emerging technologies, such as AI and IoT, may attract new entrants with fresh approaches, especially startups focusing on cost-effective solutions.

- **Market Share Stability:** Tata Elxsi's growth in automotive and healthcare, driven by AI and IoT applications, strengthens its market foothold. However, the rapid pace of digital transformation might enable newer players to capture market share quickly if they can offer innovative or lower-cost solutions.

### **3. Bargaining Power of Suppliers**

- **Supplier Concentration:** Tata Elxsi's operations rely on software tools, cloud services, and hardware supplies for its embedded systems and product designs. While specific suppliers aren't listed, reliance on a concentrated set of advanced technology providers (such as cloud and AI tools providers) could expose the company to high switching costs if suppliers have limited competition in the market.
- **Talent Costs:** The company faces rising operational expenses, particularly due to increased salary costs amid high competition for skilled talent in India. This trend has been consistent, with year-on-year operational cost increases impacting profitability

### **4. Bargaining Power of Buyers**

**Customer Concentration:** Tata Elxsi provides solutions across diverse verticals, including automotive, healthcare, and media. This diversification helps reduce dependency on any single industry or client, balancing bargaining power.

**Client Expectation for Innovation:** Clients expect constant innovation, especially in fast-evolving fields like autonomous vehicles and healthcare. Tata Elxsi's focus on high-growth sectors (such as ADAS in transportation and connected medical devices in healthcare) aligns

with current market demands, yet clients' growing preference for cost-effective and time-efficient solutions could increase their bargaining power if other firms offer similar quality at lower prices

## **5. Threat of Substitutes**

- Technological Alternatives: Tata Elxsi's segments (e.g., embedded systems for IoT, AI solutions for healthcare) are susceptible to substitutes as technology evolves. Cloud-based services, low-code platforms, and modular AI software could potentially disrupt Tata Elxsi's custom-engineered solutions.
- Price Sensitivity: As AI, IoT, and digital solutions become more standardized, clients might turn to less expensive options or substitute providers. Firms offering off-the-shelf digital solutions with scalability may become viable alternatives, particularly for price-sensitive sectors like media and communications.
- Customer Shifts: The increasing adoption of cloud-based solutions for cost-saving and flexibility might drive clients away from specialized IT providers like Tata Elxsi, favoring adaptable platforms instead.

## **14. Additional Strategic Considerations**

1. **Geographic and Market Expansion:** Tata Elxsi's growth in emerging markets, particularly Japan, has diversified its revenue streams. Its geographic diversification enhances its resilience to regional economic shifts, though it faces currency and regulatory challenges in expanding further globally

2. **Investment in R&D and Talent Management:** Balancing high R&D expenditures with profitability remains a challenge. Rising costs in talent and operational expenses, particularly in India's competitive IT talent market, demand stringent cost management. Investing in employee development and advanced R&D technologies could foster talent retention and support long-term strategic goals.
3. **Technological Advancements and Industry Positioning:** Tata Elxsi's focus on emerging technologies like AI, IoT, and 5G aligns with high-demand areas, positioning it favorably for future growth. However, the company must adapt quickly to remain at the cutting edge, particularly as competitors invest in similar technologies. Collaborations with academic institutions or tech firms could enhance its R&D capabilities and innovation pipeline.

## **15. Geographical Reach**

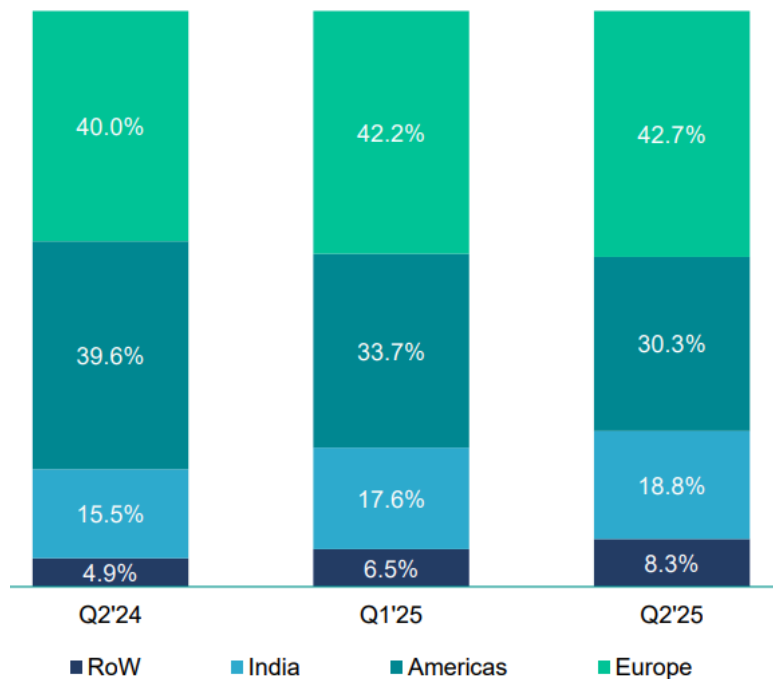
Tata Elxsi operates globally, with a strong presence in key regions including:

- **North America:** The company has a significant client base across the United States and Canada, especially in the automotive and healthcare sectors.
- **Europe:** Key markets in Europe include the United Kingdom, Germany, and France, where Tata Elxsi partners with automotive and media companies for digital transformation. Recently, they opened a new design hub in Coventry for a Centre of Excellence for Cybersecurity and AI, aligned to its strategy for Software Defined Vehicles (SDV).
- **Asia-Pacific:** India remains a core market, alongside growing footprints in Japan, China, and

South Korea, where the company provides design and digital services, especially in consumer electronics and telecommunications.

Tata Elxsi's global presence helps it cater to a diversified client base across various industries and regions, mitigating geographical risks and economic fluctuations in any one market.

**The revenue from each geographical zone is shown in this graph.**



*Source: Company Presentation*

### **Diversification/Concentration**

While Tata Elxsi is well-diversified across industries, its revenue is concentrated in certain sectors. A large part of its revenue comes from the automotive industry, where it provides engineering services, including autonomous driving, electric vehicles (EVs), connected cars, and infotainment systems. Other

key contributors include the media & communications and healthcare sectors.

Despite this concentration, the company is working on diversification by growing its presence in newer areas like healthcare, with solutions in digital health, medical devices, and regulatory compliance.

**Customer Concentration and Geographic Distribution:** The top 10 clients contributed 53.1% of revenue, up from 48.1% in FY 2023, with diversified revenue contributions across the US (38.3%), Europe (39.6%), and India (16.6%).

#### **Revenue Drivers:**

Firstly, Operating revenue for FY 2024 reached Rs. 3,552.1 crores, with a YoY increase of 13%, led by volume-driven growth (constant currency growth of 9.6% YoY). Operating profit stood at Rs. 1,046.4 crores, yielding an EBITDA margin of 29.5%. Profit before tax rose to Rs. 1,048.7 crores, a YoY growth of 11.9%, while PAT increased 4.9% to Rs. 792.2 crores.

#### **Automotive Engineering Services**

In a competitive automotive landscape, engineering services play a critical role in enhancing operational efficiency through advanced electronics and optimized manufacturing processes. Consumer demands are increasingly influenced by innovative technology, connectivity, and service options, which drives OEMs to prioritize consistent technological refreshes. Although global car sales were strong in the US and Europe in 2023 as supply chain challenges eased, the focus in 2024 is expected to shift toward market demand—particularly in regions where electric vehicle (EV) incentives may begin to decline. Notably, the automotive engineering research and development (ER&D) market is predicted to expand by 8-10% this year, largely driven by the ongoing shift towards Software Defined Vehicles (SDVs). Key deal themes in transportation include SDVs, electric powertrains, autonomous mobility (including

off-highway vehicles), and battery charging solutions. Sustainability is also increasingly integral to the automotive sector, with growing attention to fuel efficiency, emission reduction, and eco-friendly manufacturing practices.

### **Software Development and Services (SDS):**

During FY 2024, the SDS business reported revenue of ₹3,452.8 crore, marking a year-on-year growth of 12.8%. This performance was fueled mainly by growth in the Transportation and Healthcare & Life Sciences sectors. Transportation has benefited from the shift towards Software Defined Vehicles (SDVs), autonomous mobility, and electric powertrains, while the Healthcare & Life Sciences sector has seen a surge in digital health solutions, patient monitoring, and connected medical devices. Though the Media & Communications vertical faced slower growth due to a challenging global market environment, SDS's strong presence across multiple sectors allowed Tata Elxsi to sustain its revenue momentum.

### **Transportation:**

The Transportation vertical has become one of the primary revenue drivers for Tata Elxsi, contributing significantly to the company's growth trajectory. With a remarkable 24.6% year-on-year growth in FY 2024, the Transportation division generated ₹1,723.9 crore, accounting for nearly 49.9% of the Software Development and Services (SDS) operating revenue. This growth is fueled by Tata Elxsi's expertise in transformative technologies that cater to the rapidly evolving automotive industry, particularly in the software-defined vehicle (SDV) and electric vehicle (EV) segments. The SDV platform is a significant trend within the automotive sector, with global original equipment manufacturers (OEMs) increasingly investing in developing in-house SDV capabilities. Tata Elxsi has established itself as a strategic partner for SDV programs, embedding its solutions in the initiatives of five major global OEMs. A landmark multi-year deal with a leading automotive OEM showcases Tata Elxsi's robust capabilities and

reinforces its role as a trusted player in this sector.

In addition to SDVs, Tata Elxsi's TETHER Connected Vehicle Platform exemplifies the company's strength in connected technology. TETHER is a cloud-based platform powered by IoT and AI/ML that enables OEMs to offer a range of customer-centric and digitally enhanced features, from infotainment to telematics.

The company's emphasis on design-led differentiation is also highlighted through its collaboration with Tata Motors on the Gen 3 HMI, a digital cockpit experience designed for both EVs and internal combustion engine vehicles. The Gen 3 HMI has already been integrated into new SUV models like the Harrier, Safari, and Nexon and has garnered prestigious accolades such as the German Design Award 2024.

### **Media and Communications:**

The Media and Communications vertical is a key revenue driver for Tata Elxsi, contributing ₹1,217.5 crore (35.3% of SDS operating revenue) in FY 2024. Despite a modest 0.2% YoY growth, the company has expanded its market share and presence, particularly in LATAM and MEA regions, through strategic deals like transforming video services for a major LATAM operator. Tata Elxsi's innovative offerings, including QoEtient, AIVA, TEPlay, and the award-winning AI-powered OTT platform, help enhance customer experiences in media and telecom. The launch of NEURON, an autonomous network platform, further strengthens Tata Elxsi's position, winning industry accolades and securing long-term telecom deals.

### **Healthcare and Life Sciences:**

The Healthcare & Life Sciences vertical posted a growth of 10.8% YoY, generating Rs. 484.9 crores

revenue which comprises 14% of SDS operating revenue. Tata Elxsi continues to build business traction on its multiple award-winning solutions, including TEngage (the first-ever digital health platform for omnichannel care that offers a unified patient experience), TEDREG (global regulatory intelligence platform that monitors and captures real-time updates to global healthcare standards to allow companies to stay updated and ensure their products are compliant with global policy), Digital Health Platform (digital front door to all telehealth services) and TEcare (configurable platform for digital therapeutic solutions)

### **Partnerships:**

Tata Elxsi's strategic partnerships play a vital role in driving its revenue growth. Collaborations with industry leaders such as Ateame, Accuknox, Telefónica, INVIDI, and BrainChip enable Tata Elxsi to offer cutting-edge solutions across diverse sectors. The alliance with Ateame delivers advanced FAST channel deployment solutions, while the partnership with Accuknox enhances network security for autonomous systems. Collaboration with Telefónica accelerates cloud infrastructure automation in telecom, and INVIDI's targeted advertising solutions open new revenue streams. Additionally, Tata Elxsi's partnership with BrainChip enables the integration of innovative low-power technologies into medical devices and industrial applications, expanding its market reach and reinforcing its position as a leader in technological advancements.

### **Expenses:**

**Employee Costs:** Employee expenses are a major part of Tata Elxsi's operational costs. This includes salaries, benefits, bonuses, and other compensation-related expenses for its large workforce, primarily in the technology and design service sectors. Workforce is highly skilled, with many employees in technical and engineering roles, which increases the overall labor costs. The need for continuous skill

development and training also contributes to these expenses.

**Research and Development (R&D):** Tata Elxsi invests heavily in R&D, especially given the nature of its service offerings related to technology innovation, digital transformation, and product engineering. R&D expenses include the development of new service offerings, prototyping, and advanced technologies (such as AI, machine learning, and autonomous systems).

**Travel and Logistics:** Given its global operations and the requirement for employees to travel to client sites and participate in on-site projects, Tata Elxsi incurs significant travel and logistics expenses. These expenses include air travel, accommodation, transport, and per diem costs, particularly for its consulting teams who provide client-specific solutions. Tata Elxsi also incurs inland travel and conveyance costs.

**Software Licenses, Technology Infrastructure and Product Development:**

Tata Elxsi's engineers and designers rely on advanced software for tasks like product modeling, simulation, testing, and prototyping. Key software tools include CAD (Computer-Aided Design) programs, CAM (Computer-Aided Manufacturing) software, and simulation tools used in engineering applications. Examples include tools from companies like Siemens, Dassault Systèmes, and Autodesk, which help in product design and development, particularly in industries like automotive and aerospace.

With the increasing demand for digital solutions, Tata Elxsi uses cloud platforms (e.g., AWS, Microsoft Azure, or Google Cloud) for hosting, storage, and computing power. Cloud computing provides the flexibility needed to scale operations globally and enables the company to handle large data sets, perform complex simulations, and run AI/ML models effectively.

Beyond using third-party software, Tata Elxsi also invests in developing its own proprietary software solutions tailored to specific client needs. This includes developing custom applications for sectors such

as healthcare (e.g., telemedicine solutions) or automotive (e.g., connected vehicle systems).

## BUSINESS RISK

<i>Strengths</i>	<i>Weakness</i>
<p>TATA Elxsi has positioned itself as a leader in the niche markets of <b>product engineering and digital technology services</b>. Leveraging its <b>prestigious TATA brand</b>, the company maintains a strong reputation for quality and reliability, particularly within <b>automotive and media sectors</b>. TATA Elxsi's advanced product engineering services, such as <b>AUTONOMAI</b>, a scalable autonomous vehicle platform, and <b>TETHER</b>, a comprehensive telematics solution, reinforce its market leadership in automotive R&amp;D and technology. These offerings make TATA Elxsi a preferred partner for OEMs focusing on connected and autonomous vehicles, an area with significant growth potential. Additionally, the company's expertise in <b>OTT platform development</b> and <b>RDK services</b> for media clients helps solidify its position as a top provider for digital and broadcast solutions. This</p>	<p>Despite its robust service portfolio, TATA Elxsi faces significant challenges due to its <b>dependency on the automotive sector</b>, where a substantial portion of its revenue is derived. This reliance on automotive clients, who are sensitive to economic downturns and budgetary changes, creates vulnerability, especially if R&amp;D spending declines in this sector. Furthermore, while TATA Elxsi's brand enjoys considerable recognition in India, its <b>international brand presence</b> lags behind that of more established global players, limiting its ability to penetrate new markets effectively. The company's <b>labor-intensive service model</b> also pressures its cost structure, as attracting and retaining skilled tech talent is increasingly costly and competitive, especially in global markets where competitors can leverage diverse regional resources. These factors contribute to earnings volatility, which can impact</p>

<p>versatility and early adoption of AI, IoT, and automation technology showcase TATA Elxsi's alignment with industry trends, giving it a competitive edge.</p>	<p>investor confidence and financial stability.</p>
<p><b><i>Opportunities</i></b></p> <p>The increasing focus on autonomous and electric vehicles (EV) provides TATA Elxsi with growth opportunities as automakers accelerate their transition toward sustainable mobility solutions. The company's existing solutions for autonomous vehicle platforms and connected vehicle technology place it in a prime position to capitalize on the demand for electric and autonomous vehicle software. Additionally, the digital transformation sweeping sectors like healthcare and consumer electronics presents an opportunity for TATA Elxsi to expand its market reach beyond traditional industries. The company's Connected Healthcare Solutions for remote patient monitoring and its regulatory-compliant Device Engineering</p>	<p><b><i>Threats</i></b></p> <p>The IT and engineering services industry is marked by intense competition, with large players like Infosys, Wipro, and Accenture offering similar technology solutions. This competition places pressure on TATA Elxsi to maintain high service quality and competitive pricing, which can lead to compressed profit margins. Additionally, the company's heavy dependence on a few large clients, especially within the automotive sector, poses a significant risk; if any of these clients reduce spending or shift to competitors, TATA Elxsi could experience substantial revenue fluctuations. The rapid pace of technological change also represents a threat, as failure to keep up with innovations in AI, IoT, or digital health could make its offerings less</p>

<p>services enable TATA Elxsi to tap into the burgeoning digital health market. Furthermore, expanding its global footprint and strengthening its brand recognition through partnerships or acquisitions could open up new revenue streams and reduce dependence on the automotive sector.</p>	<p>attractive. Finally, macroeconomic and geopolitical factors could impact the company's international operations, affecting both demand and operational efficiency, particularly in global markets where the brand has limited influence.</p>
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## MANAGEMENT AND GOVERNANCE

1. **Composition and Profiles:** Tata Elxsi's board includes a blend of independent and non-independent directors with varied expertise. As of recent reports, the board consists of:

- ❖ **Mr. N. Ganapathy Subramaniam as Chairman (Non-Executive, Non-Independent)**
- ❖ **Mrs. Shyamala Gopinath (Independent Director)**
- ❖ **Mr. Sudhakar Rao (Independent Director)**
- ❖ **Prof. Anurag Kumar (Independent Director)**
- ❖ **Mr. Ankur Verma (Non-Executive, Non-Independent)**
- ❖ **Mr. Manoj Raghavan (CEO & Managing Director)**

**N. G. Subramaniam is the Chairman and the COO of Tata Consultancy Services (TCS).** He brings extensive experience in technology and risk management.

**Shyamala Gopinath, former Deputy Governor of the Reserve Bank of India,** contributes significant expertise in financial regulation and policy.

**Manoj Raghavan, the CEO,** has over two decades of experience with Tata Elxsi, leading roles across Japan, South Korea, and North America, underscoring a strong alignment with Tata's long-term growth and technology vision: The board has seen some rotation in recent years, including the retirement of Prof. **M.S. Ananth** in 2020 and the appointment of **Prof. Anurag Kumar**. Additionally, **Ankur Verma**, representing Tata Sons, joined the board in 2018. No significant concerns were reported about individual members regarding conflicts of interest or governance risks, as regular disclosures and transparency measures have been adhered to.

## **2. Vision:**

Tata Elxsi's vision centers on "Designing the Next" by driving innovation in emerging sectors, particularly Automotive, Broadcast, Communications, and Healthcare. This strategic alignment with Tata Group's technology and customer-centric focus underscores Tata Elxsi's emphasis on transforming traditional industries through digital engineering.

Strategic Decisions and Structuring: R&D and Global Reach: Tata Elxsi's major structuring and business decisions over the past five years:

### **a. Sectoral Expansion**

Automotive and EVs: Tata Elxsi is heavily invested in automotive technology, particularly in electric and autonomous vehicle solutions, collaborating with Tata Motors and global OEMs. This included AUTOSAR-compliant software and connected vehicle systems, positioning Tata Elxsi as a leader in automotive software (2020-21).

Healthcare and Med-Tech: Tata Elxsi expanded into healthcare by establishing Centers of Excellence (CoEs) for regulatory-compliant digital health and med-tech solutions, tapping into a growing market with applications in diagnostics and telemedicine.

### **b. Digital Product and Engineering Focus**

Product Design and Digital Transformation: The company bolstered its Embedded Product Design (EPD) division, driving innovation in digital media, communications, and consumer electronics.

Partnerships, like Google Widevine for content protection, highlight its strategic alignment with industry needs.

Global Engineering Centers (GECs): Tata Elxsi opened GECs in collaboration with clients like Schaeffler and Aesculap AG to enhance client responsiveness and tailor R&D support, strengthening its foothold in key markets(2020-21).

### **c. Geographic and Client Diversification**

Global Reach: Expansion into the U.S., Europe, and Asia-Pacific markets and investments in local innovation hubs have allowed Tata Elxsi to better serve international clients and diversify its revenue base, particularly beyond automotive.

Sectoral Focus on Healthcare and Communications: Tata Elxsi in healthcare solutions, such as point-of-care devices and regulatory-compliant digital solutions. This diversification has helped the company broaden its revenue base and leverage global healthcare market trends, which have grown substantially since COVID-19.

### **3. Capital Deployment Efficiency**

Revenue Growth and Profitability (2022-23) show a steady increase in revenues from INR 1,563 crores in FY 2019-20 to over INR 1,780 crores in FY 2020-21. The EBITDA margin improved year-on-year, highlighting the management's success in cost containment and operational efficiency.

Strategic Investments: Capital was effectively deployed in expanding digital infrastructure and R&D in high-margin areas like connected automotive systems and digital healthcare platforms. For example,

investments in the EPD (Embedded Product Design) division helped Tata Elxsi secure leadership in the automotive and media sectors, as recognised by industry studies.

Challenges and Allocation Efficiency: Although Tata Elxsi has optimized capital deployments, a large portion of revenue concentration still exists within the automotive sector, which exposes the company to sectoral volatility. Given the high valuation, more diversification in revenue streams could be beneficial to sustain the growth trajectory without over-leveraging specific segments.

#### **4. Crisis Management: COVID-19 and Beyond**

COVID-19 Response: During the pandemic, Tata Elxsi quickly adapted by moving its workforce to remote work, focusing on digital healthcare and operator-focused communications solutions. This adaptability not only preserved revenue streams but also opened new opportunities in telemedicine and digital communications.

Operational Adjustments and Risk Management: Management focused on diversifying client portfolios, especially within the automotive sector, to counter revenue dips from key clients impacted by the global downturn. This strategic shift in client risk management underscored the company's resilience and ability to pivot in response to sectoral disruptions.

#### **5. Board Composition and Corporate Governance Effectiveness**

Board Structure and Independence: The board of directors (2021-22) consisted of both independent and non-independent directors. Committees such as Audit, Risk Management, and CSR demonstrate a

comprehensive approach to governance, with each committee contributing to compliance and stakeholder transparency.

**Corporate Governance Practices:** Tata Elxsi follows stringent SEBI guidelines and the Tata Code of Conduct. Regular evaluations are conducted, covering areas like Board effectiveness, strategic oversight, and risk assessment. The lack of any major governance issues or penalties over the years reflects positively on the governance framework.

**Succession Planning:** Succession planning is somewhat implicit, with the management investing in leadership programs and executives like Mr. Manoj Raghavan, whose long standing tenure aligns with Tata Group's continuity values. However, the lack of formalized public disclosures on succession planning might be viewed as a governance gap that could be addressed to reassure stakeholders of leadership continuity.

## **6. What's Working Well and Areas of Concern**

### **Strengths:**

**Client Diversification and Digital Transformation:** Tata Elxsi's focus on high-growth areas such as digital healthcare and connected vehicle technology demonstrates management's foresight in capitalizing on tech-driven transformation.

**Strong Financial Performance and Dividend Policy:** Consistent dividend payouts and an improving profit margin show effective capital management and commitment to shareholder returns.

**Concerns:**

Revenue Concentration in Automotive Sector: Despite diversification efforts, a significant portion of Tata Elxsi's revenue is derived from the automotive sector, which is susceptible to cyclical downturns. Additional focus on healthcare and communications might help counterbalance this concentration risk.

High Valuation and Market Expectations: The company's elevated valuation suggests that the market has high expectations for continuous innovation and growth. If Tata Elxsi cannot maintain its growth trajectory, this could lead to valuation corrections, potentially impacting shareholder confidence.

**Governance Committees**

Audit and Risk Management: The Audit Committee, chaired by an independent director, oversees financial reporting, compliance, and internal audits, which bolsters transparency and accountability. The Risk Management Committee identifies and mitigates business risks, including sectoral and financial risks. Auditors: BSR & Co. LLP, Chartered Accountants.

CSR and Stakeholder Committees: The Corporate Social Responsibility (CSR) and Stakeholder Relationship Committees demonstrate Tata Elxsi's commitment to corporate social responsibility and shareholder engagement. CSR initiatives, managed by this committee, focus on community welfare and sustainability, reinforcing the company's alignment with Tata Group's ethical standards.

## **5. Shareholder Relations and Minority Protections**

Tata Elxsi's commitment to shareholder-friendly policies, including consistent dividend payments and transparent disclosures, fosters trust among minority shareholders. The company's lack of any significant share pledging or promoter-led stake sales demonstrates a low-risk governance environment.

**2018-19**

<b>Promoter and Non-promoter group</b>		<b>44.53</b>
<b>Promoter and non-promoter group</b>	42.22	
Tata sons Pvt Ltd.	2.31	
Tata Investment Corporation Limited		<b>55.47%</b>
<b>Public</b>		
Institutional Investors	14.83%	
Mutual Funds	2.72%	
Financial Institutions	0.59%	
Others	37.78%	

**2019-20**

<b>Promoter and non-promoter group</b>		<b>44.53%</b>
Tata sons Pvt Ltd.	42.22	
Tata Investment Corporation Limited	2.31	
<b>Public</b>		<b>55.47%</b>
Institutional Investors	14.39%	
Mutual Funds	2.15%	
Financial Institutions	1.27%	
Others	37.66%	

**2020-21**

<b>Promoter and non-promoter group</b>		<b>44.53%</b>
Tata sons Pvt Ltd.	42.22	
Tata Investment Corporation Limited	2.31	
<b>Public</b>		<b>55.47%</b>

Institutional Investors	17.37%	
Mutual Funds	3.99%	
Financial Institutions	0%	
Others	34.11%	

## 2021-22

<b>Promoter and non-promoter group</b>		<b>44.07%</b>
Tata sons Pvt Ltd.	42.22	
Tata Investment Corporation Limited	1.85	
<b>Public</b>		<b>55.93%</b>
Institutional Investors	18.09%	
Mutual Funds	3.15%	
Financial Institutions	0.4%	
Others	34.29%	

## 2022-23

<b>Promoter and non-promoter group</b>		<b>43.91%</b>
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Tata sons Pvt Ltd.	42.22	
Tata Investment Corporation Limited	1.69	
<b>Public</b>		<b>56.09%</b>
Institutional Investors	13.85%	
Mutual Funds	1.84%	
Financial Institutions	0.4%	
Others	if 40%	

**2023-24**

<b>Promoter and non-promoter group</b>		<b>43.92%</b>
Tata sons Pvt Ltd.	42.22	
Tata Investment Corporation Limited	1.70	
<b>Public</b>		<b>56.08%</b>
Institutional Investors	14.56%	
Mutual Funds	1.81%	

Financial Institutions	0.02%	
Others	39.69%	

The shareholding pattern of Tata Elxsi across the years 2019-20 to 2022-23 reveals some key trends and changes:

1. **Stable Promoter and Non-Promoter Group Holdings** : The shareholding percentage of the promoter and non-promoter group has remained quite consistent, with a slight decrease from 44.53% in 2019-20 to 43.91% in 2022-23.

2. **Increasing Public Shareholding** : Public shareholding has increased marginally from 55.47% in 2019-20 to 56.09% in 2022-23. This indicates a steady rise in public interest or share ownership in the company over time.

3. **Fluctuating Institutional Investors** : The percentage held by institutional investors has varied. It peaked in 2021-22 at 18.09% and then dropped to 13.85% in 2022-23. This fluctuation could be due to varying investment strategies or market conditions affecting institutional interest.

4. **Mutual Fund Holdings** : There has been a general decrease in mutual fund holdings, with a peak at 3.99% in 2020-21 but a decrease to 1.84% by 2022-23. This suggests a possible shift in mutual fund investment priorities.

5. **Decreasing Financial Institutions' Holdings** : Financial institutions' shareholding has been consistently low, showing only slight variations. It is lowest in 2022-23 at 0.4%, reflecting minimal interest or involvement from financial institutions.

6. **Volatile "Others" Category**: The "Others" category under institutional investors has seen significant variation, from a low of 10.97% in 2019-20 to a high of 14.54% in 2021-22, and then falling to 11.61% in 2022-23. This variation could be driven by changes in investment from various smaller institutions or private equity players.

Overall, the data indicates a slight increase in public shareholding and a consistent holding pattern by the promoter and non-promoter group, while institutional investment has shown some variability. This pattern suggests a stable yet dynamic interest from various investor groups in Tata Elxsi over recent years.

## FINANCIALS

Financial Performance of the Company

**Key financial indicators are as below: ( ` Lakhs)**

For the year ended March 31	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	September 30, 2024
	Actuals	Actuals	Actuals	Actuals	Actuals	Audited
No. of months	12	12	12	12	12	6
Total operating income (TOI)	166,827.29	186,592.49	251,533.19	321,853.26	367,409.75	101,939.00
EBITDA	33744.14	51648.24	75629.18	94508	102617.36	25353.12
EBITDA/TOI (%)	20.22%	27.67%	30.06%	29.36%	27.93%	24.87%
Interest	556.26	593.19	942.51	1,619.86	2,026.07	484.67
Depreciation	4,341.35	4,438.09	5,533.55	8,138.98	9,944.94	2,715.46
Operating Profit (OP)	35,244.04	51,186.67	74,548.90	93,750.03	104,867.60	29,068.03
Non-Operating Income	5,841.25	3,976.52	4,453.27	7,381.01	12,195.18	6,430.37
PBT	35,244.04	51,186.67	74,548.90	93,750.03	104,867.60	29,068.03
PAT	25,610.01	36,812.19	54,967.15	75,519.32	79,223.79	22,943.20
<b>Financial Ratios</b>						
<b>Profitability Ratios</b>						
Gross Margin	94.964%	95.234%	94.892%	94.076%	94.557%	93.803%

EBITDA Margin	20.96%	28.28%	30.61%	30.05%	28.89%	26.55%
Operating Margin	18.26%	25.85%	28.37%	27.46%	26.09%	23.70%
Net Margin	15.35%	19.73%	21.85%	23.46%	21.56%	22.51%
<b>Liquidity ratios</b>						
Quick Ratio	5.52	5.26	4.13	4.83	5.69	5.24
Current Ratio	5.53	5.26	4.13	4.83	5.69	5.24
Net working capital to						
Total assets Ratio	0.71	0.66	0.59	0.66	0.66	0.64
<b>Working capital cycle</b>						
Average Accounts						
Receivable Days	88.96	97.81	99.39	113.33	99.84	376.36
Inventory Days	1.3542470	0.04620805	0.322925791	0.17077995	0.4221674	0
Accounts Payable Days	212.18742	235.379400	243.8102715	202.134865	161.67093	694.80478
Cash Cycle (Days)	-121.87	-137.52	-144.10	-88.64	-61.41	-318.45
<b>Leverage Ratios</b>						
Assets/Equity	1.27	1.27	1.35	1.32	1.27	1.28
Debt/Equity	0.053	0.054	0.087	0.087	0.089	0.083
Long-term Debt to Total						
Capital	0.012	0.009	0.012	0.013	0.016	0.017
Net debt/ EBITDA	-0.504	-0.053	-0.017	0.051	0.088	0.408

Times interest earned/Interest coverage Ratio	62.359	85.291	78.096	56.875	50.759	58.975
<b>Efficiency Ratios</b>						
Fixed Asset Turnover	19.563	21.233	19.490	19.687	18.476	5.458
Accounts Receivable Turnover	4.103	3.732	3.672	3.221	3.656	0.970
Inventory Turnover	768.59375	21527.157	3118.665903	5906.349	2371.4402	

## PEER COMPARISON

This comparison table, sourced from Screener, highlights Tata Elxsi's position in the IT services sector through key metrics like market cap, P/E ratio, dividend yield, and ROCE. It benchmarks Tata Elxsi against competitors such as Oracle Financial Services and Coforge, offering a quick view of its financial performance and operational efficiency within the industry.

No	Name	CMP (Rs.)	P/E	Market Cap (Rs. Cr.)	Div. Yield (%)	NP Qtr (Rs. Cr.)	Qtr Profit Var (%)	Sales Qtr (Rs. Cr.)	Qtr Sales Var (%)	ROC E (%)
1	Oracle Fin. Serv.	10650.05	37.0	92438.55	2.20	577.70	38.39	1673.90	15.88	39.54
2	PB Fintech	1693.00	754.2	77219.44	0.00	59.98	320.86	1010.49	51.82	1.75
3	Coforge	7505.00	63.49	50053.68	0.99	233.60	11.71	3062.30	34.54	28.60
4	Tata Elxsi	7049.50	53.69	43905.65	1.00	229.43	14.70	955.09	8.32	42.74
5	Tata	1005.1	63.07	40773.7	0.84	157.41	-1.85	1296.45	2.15	28.29

	Technolo gy.	0		7						
6	KPIT Technolo gy.	1391.9 5	52.53	38159.4 3	0.47	203.75	45.30	1471.41	22.70	38.36
7	Firstsour. Solu.	344.15	45.30	24259.7 5	1.03	138.21	9.25	1925.38	25.03	15.42
	<b>Median (145 Co.)</b>	<b>290.0</b>	<b>39.82</b>	<b>1031.53</b>	<b>0.00</b>	<b>5.88</b>	<b>22.53</b>	<b>62.55</b>	<b>9.74</b>	<b>17.75</b>

## **Comment on financials**

### **Total Income:**

TATA Elxsi has shown a strong and consistent revenue growth year-on-year. Total income increased from ₹166,827.29 lakh in 2019-2020 to ₹367,409.75 lakh in 2023-2024, reflecting a strong compound annual growth rate (CAGR) in revenue. Other income has also contributed to this revenue growth.

### **Profitability:**

The gross margin is high and stable, around 94% over the years. This implies excellent control over production and operational costs, allowing Tata Elxsi to retain a large portion of revenue as gross profit.

EBITDA margin reflects operational efficiency, with a slight decrease to 28.89% in 2023-2024, down from a peak of 30.65% in 2021-2022. This minor decline might be due to operational discrepancies and usual industry changes. Despite this, a margin above 28% still suggests highly efficient management of operational costs.

Over five years, Tata Elxsi's net profit margin increased from 20.37% in 2019-2020 to 25.04% in 2023-2024, showing a clear upward trend.

### **Interest:**

There is no interest expense as it is a debt-free company.

### **Non-operating income and expense:**

Tata Elxsi has consistently earned income from non-core activities. This income grew from **₹4,703.20 lakh** in 2019-2020 to **₹12,195.18 lakh** in 2023-2024, contributing positively to overall profitability.

The lack of significant non-operating expenses highlights Tata Elxsi's focus on maintaining efficient operations without bearing excessive one-time or irregular costs.

**Net fixed assets:**

Tata Elxsi has actively invested in its fixed assets, which is evident from the increase in property, plant, and equipment (PPE). PPE grew from **₹8,229.25 lakh** in 2019-2020 to **₹19,225.50 lakh** in 2023-2024, indicating substantial investments to enhance infrastructure, supporting long-term operational growth and capacity expansion.

**Net working capital:**

Tata Elxsi maintains a positive working capital position, crucial for meeting short-term obligations. In 2023-2024, the current assets include ₹14,216.63 lakh in trade receivables and ₹110,865.82 lakh in cash and cash equivalents, which ensure liquidity. The presence of sufficient current assets relative to liabilities indicates operational liquidity, therefore making them a debt-free company.

**Leverage and debt repayment schedule**

Maturity analysis – contractual discounted cash flows						
Lease Liabilities	Year	Contractual cash flows				
Page 227		Carrying amount	Total	0-1 years	1-5 years	5 years and above
in lakhs	2023-24	22,398.14	22,398.14	4,279.24	17,176.94	941.96
	2022-23	18,226.40	18,226.40	2,853.72	12,161.27	3,211.41

The company's leases span 2 to 10 years with renewal options, allowing flexibility but adding potential renegotiation risks. It has chosen to expense short-term (12 months or less) and low-value leases rather than recognizing them as liabilities, simplifying reporting but increasing operating expenses.

## **Non-current assets**

### **Contingent Liabilities and commitments**

The contingent liabilities and commitments of the company (to the extent not provided for) are detailed in the following table:

(` lakhs)

Particulars	FY2024	FY2023
(i) Contingent liabilities:		
Claims against the Company not acknowledged as debt		
Disputed demands for Income Tax aggregates.	67.29	67.29
(ii) Capital Commitments:		
Estimated amount of contracts remaining to be executed on capital accounts and not provided for		
Property, plant and equipment	1408.49	1169.05
Intangible assets	71.05	
<b>Total</b>	<b>1546.83</b>	<b>1475.78</b>

It is important to note here that the only major change in contingent liabilities and commitments is that of intangible assets and small portion of PPE which suggests that capital commitments for a company like TATA Elxsi have had changes based on recent deals and developments of the industry.

## **Foreign currency risk**

**Revenue Dependence:** With approximately 80-88% of revenue generated from outside India, the company's financial performance is heavily impacted by foreign exchange rates. Changes in currency values, especially those of major markets such as North America and Europe, can directly influence revenue.

**Cost Impact:** Tata Elxsi's foreign operations entail expenses in multiple currencies, adding another layer of foreign exchange risk. Any depreciation of the Indian Rupee could increase foreign currency-denominated costs, potentially impacting profitability.

**Mitigation Strategies:** To manage this exposure, Tata Elxsi might engage in hedging or use forward contracts to lock in exchange rates. Additionally, geographic diversification helps spread the risk across different currencies, potentially stabilizing income if a single currency fluctuates.

**Conclusion:** Tata Elxsi's reliance on foreign revenue emphasizes the need for effective currency risk management to protect against adverse exchange rate movements. Implementing financial hedges or maintaining a balanced currency reserve could help mitigate this risk, maintaining stable financial performance

## **Cash flow analysis**

The most interesting part of Elxsi's cash flow statement is the balance it maintains in its investing and financing activities.

The investing activities reflect significant capital expenditures, emphasizing the company's focus on long-term asset development. Investments in property, plant, and equipment have increased annually, reaching 19,225.50 in 2023-2024 from 8,229.25 in 2019-2020. This growing allocation likely supports

Tata Elxsi's initiatives in upgrading technology infrastructure or expanding capacity, which is essential for maintaining competitive advantage in sectors like design and technology services. Furthermore, the company's shifts in fixed deposit placements and interest income suggest a nuanced approach to liquidity management. In years like 2020-2021, a large outflow (-42,440.03) in deposits indicates a repositioning of funds, likely to seize favorable investment opportunities, while the subsequent inflows suggest optimized interest income strategies, as seen in 2023-2024's net inflow of 8,735.52. These actions underline Tata Elxsi's commitment to enhancing operational capability and flexibility in capital usage.

On the financing side, Tata Elxsi displays a structured approach toward capital return to shareholders while managing liabilities. Dividend payouts have seen significant growth, increasing from 10,135.47 in 2019-2020 to 37,739.52 in 2023-2024. This trend of escalating dividend payments reflects Tata Elxsi's emphasis on providing value to shareholders as profits grow. However, these high dividend distributions have also contributed to substantial financing cash outflows, reducing the overall cash retained within the company. Additionally, the company's payment of lease liabilities, which reached 4,976.76 in 2023-2024, indicates an ongoing reliance on leasing arrangements for facilities or equipment, potentially a strategic move to maintain asset-light operations in some areas. Overall, Tata Elxsi's investing and financing activities demonstrate a balanced approach to capital allocation, combining shareholder rewards with ongoing investments that aim to drive future growth.

TATA Elxsi's cash flow statement from 2019 to 2024 reveals several key insights about the company's financial performance and strategies. The statement highlights consistent growth in cash flows from operating activities, indicating that the company's core business is performing well and generating strong cash returns. This growth in operational cash flow is driven by increased profits, effective cost management, and rising tax outflows due to higher income. One notable aspect is the sharp rise in

profits, from ₹25,610 million in 2019-2020 to ₹79,224 million in 2023-2024, showing that TATA Elxsi has experienced substantial growth, which has positively influenced its operating cash position.

Investment cash flows reflect the company's focus on expansion and infrastructure development. Over the years, TATA Elxsi has increased spending on property, plant, and equipment, suggesting a long-term commitment to growth through improved technology and facilities. However, this also led to a consistent net cash outflow in investing activities. For instance, in 2023-2024, the net cash outflow from investments was 2.7014 crores indicating that while the company is enhancing its asset base, these investments come at a high cash cost. Additionally, TATA Elxsi frequently allocates large sums to bank deposits, likely as a liquidity reserve. This approach shows that while the company is focused on growth, it is also cautious, maintaining liquidity to manage financial uncertainties.

In financing activities, TATA Elxsi's increasing dividend payments, which reached ₹37,740 million by 2023-2024, demonstrate a strong focus on shareholder returns. While this is positive for investors, it represents a significant cash outflow, limiting the amount available for reinvestment. Combined with rising lease payments, these financing cash outflows highlight a potential trade-off between rewarding shareholders and retaining cash for future investments. As a result, net cash from financing activities shows a growing outflow trend, particularly from 2021-2022 onwards.

In summary, TATA Elxsi's cash flow trends highlight three main insights: (1) robust cash generation from core operations indicates strong business performance, (2) high reinvestment in assets reflects a long-term growth focus, and (3) substantial dividend payouts reveal a commitment to shareholders, though they limit cash available for further investments. If operating cash flows continue to grow at the current rate, the company can likely sustain this balance between growth and shareholder returns.

However, any slowdown in operational cash could challenge TATA Elxsi's ability to fund both investments and dividends without tapping into reserves or raising additional capital.

### Valuation

Company	P/E	P/B	EV/EBI TDA	EV/Sales	P/CF	PEG	ROE	ROCE
TATA ELXSI	52.92	17.80	40.30	13.64	48.77	N/A	31.61	38.99
Oracle Financial Services	37.66	9.69	20.95	18.52	37.58	N/A	34.62	46.60
PB Fintech	0.81	6.56	1,041.70	N/A	N/A	N/A	0.46	0.58
Tata Technology	54.04	12.86	N/A	N/A	N/A	N/A	N/A	N/A
KPIT Technology	97.98	N/A	72.35	9.06		N/A	N/A	N/A

## RECOMMENDATION

**TATA Elxsi** is an established company with a strong track record of profitability and growth over the last five years. Fundamentally, the company shows potential for growth in double-digits which on the face value is a good sign. However, on having a thorough understanding of the position of the company and its financials here are some key points to bring into consideration when assessing our recommendation.

Our recommendation is as follows: The company's presence in high growth service lines of design, embedded and digital engineering, diversified vertical exposure and superior margins drives us to assign **HOLD** ratings given premium valuations. This high valuation persists despite a recent or expected slowdown in the company's growth rate (moderating growth).

### Key highlights:

- Company is almost debt free and has no short term portion of long term debt.
- Growth is driven by client concentration which may seem attractive but flags a layer of concern since the company clients are highly dependent on concentrated clients. TELX growth in FY24 continued to remain skewed by various client cohorts and within verticals and sub-segments. JLR revenue (T1 client) contributed 18% to FY24 revenue
- Transportation growth is to continue at a healthy pace despite slowdown for the overall industry. Growth is expected to be strong in the OEM sub-segment (JLR and others). Revenue share from auto OEMs has now increased to 68% of total transportation revenue. It recently won a USD 50 million five year deal from a global OEM headquartered in Europe, which encompasses SDV and multiple domains of automotive engineering.

- The company added some new marquee customers in its healthcare vertical – including a global renal care leader and a US-headquartered health-tech AI leader, which are expected to scale up over the next few quarters.
- Lastly, TELX's industry-leading margins have been steady in the 29-31% EBITDA range which highlights improvements in cash generation.

## **Key Risks**

### **Downside risks:**

- 1) The stock is trading at 17.4 times its book value, suggesting that it is overvalued but due to strong fundamentals, the market should allow the stock to correct.
- 2) High top 5 client concentration
- 3) Delay in recovery in Media and Communication and Healthcare segments

### **Upside risks:**

- 1) Faster ramp ups of existing and new large deal wins
- 2) Company is almost debt free.
- 3) Company has delivered good profit growth of 22.4% CAGR over last 5 years
- 4) Company has a good return on equity (ROE) track record: 3 Years ROE 37.4%
- 5) Company has been maintaining a healthy dividend payout.

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