BUY

CMP: **INR 1,058** Target Price: **INR 1,330** ▲ 26%

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15 May 2024

India | Equity Research | Initiating Coverage

Tata Technologies

Technology

Technological transcendence: Pivoting from mechanical to electronics and digital services

Tata Technologies (TATATECH) offers an opportune entry into the fastest-growing auto-Engineering, Research & Development (ER&D) segment (vs. IT services peers). Amplifying TATATECH's proposition are structural catalysts that will help the company transition its services portfolio and encompass the much desirable digital engineering sub-segment. The Tata Group lineage too helps TATATECH augment synergistic advantages in the aviation sub-segment. While we note that a client-specific ramp-down poses a challenge for growth, we see this as transient; in our view, prevalent and potential growth eclipses the ramp-down. On balance, we forecast 13%/18% revenue and 16%/23% EPS growth in FY25E/26E with 23–25% RoE. We initiate with **BUY** and a TP of INR 1,330 on a one-year forward PE of 56x (in-line with lifetime median/average PE) on FY26E EPS of INR 23.8. Key risks: Under-penetration in Europe; and other verticals being unable to adequately compensate for VinFast's ramp-down.

Opportune positioning; at the right place at the right time

We see TATATECH set amid propitious conditions, being ably shouldered by the fast-growing automotive ER&D segment with conspicuous exposure to automotives (86% of revenue) and a foot in the door in aviation (single-digit share of revenue). ER&D services, TATATECH's mainstay, is outpacing industry growth on the back of structural drivers (increasing digital engineering penetration of enterprises, India's favourable position as an outsourcing destination, lower outsourcing penetration, need for speed to market, etc.) compared to other IT Services players. NASSCOM estimates ER&D CAGR of 8–9% between 2023–30, clearly a faster clip than IT Services. Moreover, automotives-focused ER&D players, namely KPIT/TATATECH posted 40%/30%* YoY USD revenue growth in FY24 capturing industry-leading growth, vs. 1.8% USD revenue growth for tier-1 IT Services players in FY24. Structural growth drivers remain intact.

Poised for digital pivot

The company has the right catalysts at play for it to pivot from mechanical to electronics and digital services. We envisage its strides in this direction to be driven by: 1) ownership/equity and commercial relation with its largest client Tata Motors – for which, it gets a leg up vs. peers given favourable growth dynamics and ownership overlap too; and 2) new energy start-up clientele. By virtue of its relationship with Tata Motors, the company also receives support for digital capability creation, as clients undergo digital transition. Besides, TATATECH is a strategic vendor to 12 new energy start-ups who score high on cutting-edge digital engineering quotient; thus, upscaling its services portfolio will likely be beneficial for TATATECH.

Financial Summary

Y/E March (INR mn)	FY24A	FY25E	FY26E	FY27E
Net Revenue	51,172	58,305	69,050	77,824
EBITDA	9,413	11,068	13,760	15,665
EBITDA Margin (%)	18.4	19.0	19.9	20.1
Net Profit	6,794	7,873	9,666	10,916
EPS (INR)	16.7	19.4	23.8	26.9
EPS % Chg YoY	8.9	15.9	22.8	12.9
P/E (x)	63.2	54.5	44.4	39.3
EV/EBITDA (x)	45.0	38.2	30.5	26.5
RoCE (%)	19.6	20.9	23.2	23.3
RoE (%)	21.9	23.0	25.1	25.0

*dollar-revenue growth ex-VinFast

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Market Data

Market Cap (INR)	429bn
Market Cap (USD)	5,143mn
Bloomberg Code	TATATECH IN
Reuters Code	TATE.BO
52-week Range (INR)	1,400 /1,004
Free Float (%)	16.0
ADTV-3M (mn) (USD)	18.5

Price Performance (%)	3m	6m	12m
Absolute	(4.4)	-	-
Relative to Sensex	(5.9)	-	-

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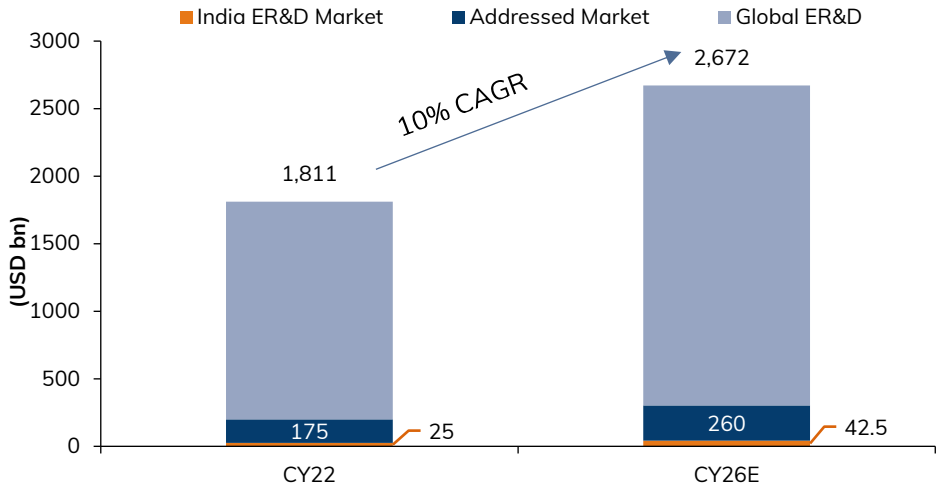
Industry overview

Delayed outsourcing in ER&D; now picking up

Of the USD 1.5tn (USD 1.8tn by CY23) global ER&D spend, only 5% gets outsourced. This indicates huge headroom for growth in the ER&D space. Manufacturers and automotive OEMs have traditionally tried to build everything end-to-end in-house. That is slowly, but surely changing. US and European OEMs are rebalancing their engineering pool by offshoring. OEMs are collaborating and partnering with technology companies along the value chain with outside vendors and even semi-conductor players and hyper-scalers. OEMs have now come to build 50-60% of their vehicles in-house while outsourcing the rest. This is a huge development from a decade ago when 100% of the vehicle was made in-house.

Exhibit 1: Global ER&D opportunity to reach ~USD 2.7tn by CY26 – CAGR of 10%

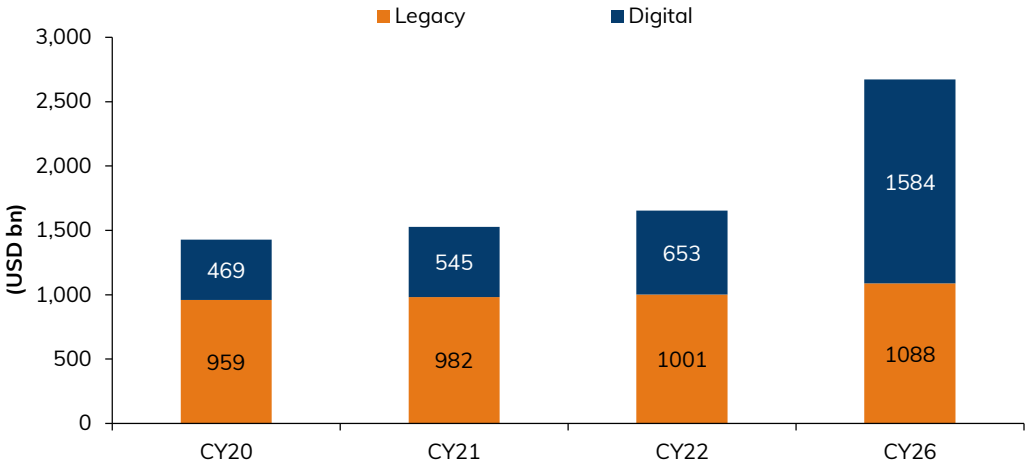


Source: NASSCOM, Zinnov estimates, I-Sec research

Digitisation of ER&D

Till CY22, legacy ER&D spend outpaced digital ER&D spend by 1.5x. However, we see the converse likely prevailing in CY26 with digital ER&D spends overshadowing legacy spends by 1.5x. While legacy ER&D spend is expected to grow at 2% CAGR between CY22–26, digital ER&D is estimated to grow at a whopping 18%. In digital ER&D, there is burgeoning demand for AI/ML, cloud, data analytics.

Exhibit 2: Rise of digital ER&D

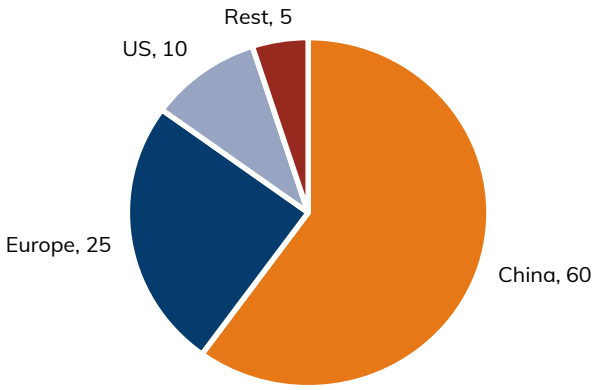


Source: Zinnov, I-Sec research

Electrification and digitisation in auto industry to drive growth

Electrification of vehicles is progressing in full swing. That said, despite the ongoing global emphasis on electrification of vehicles, the majority of progress in this avenue seems to be currently centred in only a handful of countries i.e., China and US, and Europe as a region. This presents huge opportunity for ER&D players with high exposure to the transportation vertical. Considerable opportunity is arising from China and Europe. ER&D players with high penetration in Europe also stand to benefit from this trend.

Exhibit 3: China and Europe – major geographies driving new EV registrations



Source: IEA EV 2024, I-Sec research

Unbridled EV demand till 2030 – regulatory and investment impetus

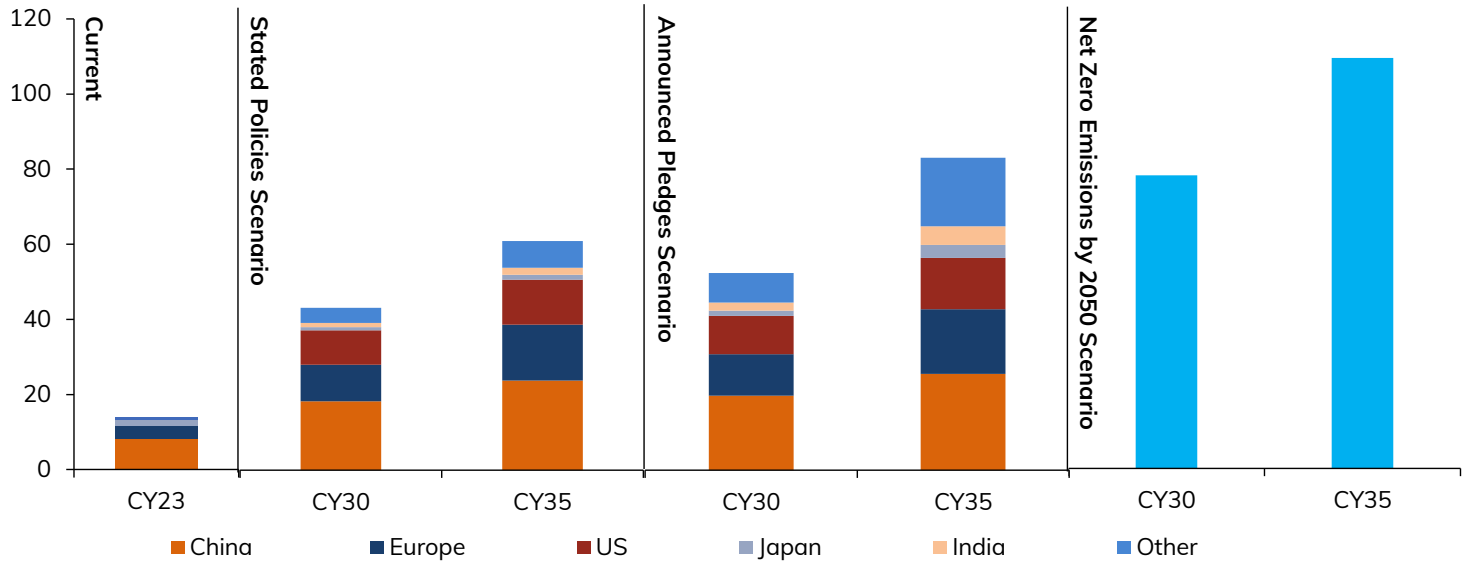
The next 10-years are going to be more disruptive for the automotive industry than the last 100 years, with electrification as the overarching theme.

Major geographies are pushing the peddle on EV and electrification ecosystem-related investments. 2030 is the target year for most to achieve solid footing on the EV front. Both, government's regulatory push and private investments are creating a conducive environment for EV demand to thrive. Hence, we see EV demand buoyancy at least until 2030.

Fast-paced consumer adoption of EV is supplemented by regulatory push across the globe. Per IEA (International Energy Agency), by 2035, more than a-fourth of vehicles on the road will be electric, implying a 12x growth in electric fleet by 2035.

Per IEA, in the stated policies scenario, EV sales (excluding 2/3Ws) is expected to reach almost 45mn in CY30 and ~65mn in CY35, up from around 14mn in CY23. The sales share of EVs will grow from around 15% in 2023 to ~ 40% in 2030 and over 50% in 2035. In the announced pledge scenario, the sales shares are higher, ~45% in CY30 and two-thirds in CY35. In the net zero emissions scenario, EV sales shares accelerate over the next few years, reaching about 65% in CY30 and 95% in CY35. The exhibit below illustrates a country-wise projection of the same.

Exhibit 4: Electrification of vehicles in major countries: EV sales by region and scenario



Source: IEA, I-Sec research | EV projected sales country wise under different scenarios: 1) Stated Policies scenario 2) Announced Pledges Scenario 3) Net Zero emissions by 2050 scenario

Exhibit 5: Major geographies pushing the peddle on EV investments

Country	EV-fication target year	Level of investments required to achieve this target
US	President Biden's pledge to ensure that 50% of all vehicles sold by 2030 are electric.	Companies have invested ~USD 85bn in manufacturing batteries, Evs and EV chargers in US, since president Biden took office.
Europe	EU aims for climate neutrality by 2050. It also aims for 50% reduction in net greenhouse gas emissions by 2030 and zero-emission road mobility by 2035.	Top European OEMs have already invested ~USD 35–40bn in electrification.
China	The economy aims to achieve carbon neutrality by 2060	Largest market for Evs. Chinese OEMs are now looking to expand Evs and their ancillary production overseas with EV OFDI standing at USD 28.2bn in 2023 vs. USD 29.7bn in 2022.
India	The Government of India intends to have EV sales penetration of 30% for private cars, 70% for commercial vehicles, 40% for buses, and 80% for two and three-wheelers by 2030.	On Mar'24 the Indian government approved a new USD 500mn-worth EV policy, offering range of incentives with the intention of drawing investments from global EV companies and positioning India as a prime manufacturing hub for state-of-the-art Evs.

Source: Company data, I-Sec research

Exhibit 6: Investments by major OEMs in Europe to build EV ecosystem

OEMs	Investment	Region	Remarks
Northvolt	USD 3-5bn	Sweden	EV battery plant in Heide.
ACC: a JV of Stellantis, Mercedes and Total Energies	EUR 7bn	Across Europe	Plan to create three gigafactories in Europe; aim to reach capacity of 40GWh by 2030.
ProLogium	EUR 5.2bn	Dunkirk	Expanding production outside Taiwan.
Envision	EUR 2bn	Douai	Building AESC gigafactory – expected capacity to reach 24GWh by 2030.
Envsion in Spain	EUR 2.5bn	Spain	Planning to build gigafactory with an annual production of 30GWh
Volkswagen	EUR 10bn	Across Europe	Plans to build six battery factories across Europe – total 240GWh capacity by 2030.
CATL	NA	Erfurt	Expanding supply chain outside China.
BASF	NA	Germany	Building battery materials site.
Verkor	NA	Dunkirk	Building gigafactory with 12GWh targeted capacity.
Tata Group	NA	Spain/ Britain	Looking for sites to set up battery production plants.
LG	EUR 95mn	Poland	Started production in 2017; now expanding capacity – targeting 115GWh by 2025.

Source: Company data, I-Sec research

Gigafactories: plants producing batteries on a large scale

All major automotive and aerospace OEMs are hinting at pressing the peddle on electrification, primarily driven by ESG regulations (to meet the 2030 deadline). The demand cycle in automotive has shifted from 'early adopters' to 'early majority' and customers are looking for cheaper EV options. While this has led companies to cut costs and pass on the benefits to customers, because of the regulatory push, companies are not being tactical in their approach; rather going full speed towards electrification and optimising their EV capex plans in along the way in accordance to the changing EV landscape. Chinese OEMs are already ahead in the game and western OEMs are playing catch-up. In aerospace, there is supply issue with pent up demand post covid. The defence segment demand in aerospace is looking up given the current geopolitical climate.

Exhibit 7: Major OEMs' commentary on demand and electrification

Company	Q3FY24	Q4FY24	Our observations
Ford	Next thing I'd like to highlight is Evs. Now someone portrayed the change in the EV market as Darwinian. That could be a slow evolutionary change, but we think this has been a seismic change in the last six months of last year. That will rapidly sort out winners and losers in our industry. Now the catalyst for that seismic change is a combination of EV manufacturers cutting their price by 20% across all major geographies and a tremendous amount of capital flowing and a ton of new capacity into one single segment, two-row crossovers. Our overall EV strategy has never been more relevant as the seismic change happens, and we want to share with you our targets. We're also adjusting our capital switching more focused on to smaller EV products. All of our EV teams are ruthlessly focused on cost and efficiency in our EV products because the ultimate competition is going to be the affordable Tesla and the Chinese OEMs.	We expect every one of our EVs to make money in the first 12 months, and that is a very disciplined process. In fact, we delayed the launch of our three-row crossover, which is a great product, two years, not only to match the slower growth in EV but more importantly to take advantage of new battery chemistry and formats to substantially reduce the cost of the batteries for that vehicle. We'll do everything it takes to be profitable in the first 12 months of our vehicles.	Profitability of newly launched EVs in the first 12 months is a focus area. The company is competing in the small cars and vehicles category.
	Our overall EV business will grow this year because we have the Explorer launching in Europe and really exciting, many of our commercial vehicles launched with electric this year as we refreshed the line-up.	In the U.S., retail sales jumped 77% versus the total EV segment, which was up roughly 2.6%. Our total EV market share grew by 3.4 points to 7.5%, and Mach-E was the second best-selling e-SUV, only behind Tesla's Model Y.	EV landscape is evolving, leading the company to tighten its capex.
	With EV growth, but as well importantly the COVID supply shocks and the chip crisis itself and Tesla's ability to make vehicles despite the chip crisis in '21 and '22 and the zero cost of capital gave us too optimistic of a demand signal at that time, and it drove a temporary spike in supply. As the COVID shock retreated, we learned that as you scale Evs to 5,000 to 7,000 units a month, and you move into the early majority customer, they are not willing to pay a significant premium for Evs. This was a huge moment for us.	We're tightening our CAPEX range to USD 8bn to USD 9bn as the team adjusts to the dynamic EV landscape. Now, the most important thing, as Jim said, is we need to get the EV business to stand on its own, to be profitable and return on the capital we've invested. What we're finding with being in the marketplace is that EV prices are normalizing, and our early majority customers are not willing to pay a premium. And that's what we're seeing. And so, we think that prices for EVs are going to normalize around where gas is and the consumers are going to weigh the value proposition of that propulsion choice, either for their duty cycle, what works for them, either it's going to be an EV or a traditional ICE engine or a diesel or a hybrid.	The demand cycle of EVs has moved from early adopters to early majority, a portion that is seeing hesitance towards paying a premium for Evs.
Volkswagen	Compared to the prior year, our BEV deliveries increased by 35% to a total of 771,000 vehicles. In the final quarter of 2023, the share of our BEVs reached 10%. This strong basis and the upcoming launches of some highly attractive new BEV models make us confident that we will be able to grow our BEV share also in 2024. Our BEV sales accelerated their sales momentum, in particular, supported by an extensive cost work and improved product substance. As a result, BEV volumes increased by 22% to 191,000 units with 74,000 units in the fourth quarter alone.	In total, we expect to reduce material cost by 40% with our China main platform and achieve prosperity with local BEV leaders in the price sensitive compact in minor segment by 2026. Incoming orders continue their encouraging positive trend in the past month, in both BEV and combustion engine car segments. The brands of the Volkswagen group collected in total 730,000 new orders in Western Europe in the first quarter, BEV order intake was particularly strong, more than doubling compared to the same period last year.	The company is trying to gain footing in the price sensitive EV segment. EV order intake has been strong; however, the company is playing catch-up with Chinese competitors.

Company	Q3FY24	Q4FY24	Our observations
	The proportionate operating result of our Chinese JVs amounted to EUR2.6bn, thus holding up well in a highly challenging competitive environment, particularly in the BEV segment. Our price mix should benefit from numbers of new model launches, lower material prices and product costs should favor us in 2024, as well as first positive effects from the execution of our performance programs, not to forget our continuous fixed cost work.	Europe, deliveries were slightly down year-on-year to about 970 – 907,000 vehicles, largely due to weaker BEV deliveries. Demand for battery electric vehicles was muted at the beginning of the year in Europe and North America. Substantial growth in China could not fully compensate for this and as a result, BEV deliveries declined slightly by 3%. BEV delivers leached 136,000 units, corresponding to about 7% of group deliveries.	In Europe, however, there is a slight slump in EV demand. BEV demand in China continues to be strong and the environment remains competitive. Hence, the company is ceding some market share in China, as per its strategy of value over volume.
	I would say, 2026, we make sound compromises between margin and volume. And this is why I said, or we said, we are deliberately prepared to give up some more share in the next two to three years, I would say, two years. And from 2027 onwards, we want to pick up also shares significantly in the BEV segments, in the BEV market. So this is our path in China going forward.	BEV deliveries were down in Europe and US by 24% and 16% respectively, while BEV volumes in China almost doubled. BEV incoming orders, on the other hand, had doubled versus the first quarter 2023. The BEV share target of 9% to 11% is confirmed. Performance in the coming quarter should be supported by the most recent and upcoming launches such as the all new ID7 tourer, the Macan Electric and Q6 e-tron. Needless to say, that we review the global BEV sales expectations continuously and are prepared to adjust the capacity and CapEx planning in PowerCo unit accordingly if necessary.	
Tata Motors/ JLR	And from a focus completely on building out the EV ecosystem, signed MOUs for almost 17,000 public charges and also started with the first dedicated EV showrooms in India. I think though, is the cash profit after tax column in the middle there, 1.24bn. That is also a record for JLR. Delivering that level of cash profits does allow us to fund investment spending that is increasing as we move towards the delivery of our new BEV electrical architectures – BEV and electrical architectures.	On the EV side, the host of actions and particularly call out the new EV dedicated stores that are starting to open up and of course launch of the next architecture in our framework, the Pure EV architecture, and of course commencing of production on the new facility in Sanand.	The focus is on building EV and developing the BEV infrastructure. PHEV is also seeing high share of demand. JLR is on its way to electrify major models by end-2026. Range Rover Electric is coming.
	Range Rover is coming soon, followed by Jaguar and our EMA architecture, such that by the end of '26, Jaguar and four landmark BHEVs will be available. Two others will follow a little bit later. Partly is we do continue to see very strong demand, particularly for PHEVs. As a transition technology, PHEVs do seem to be taking an increasing share of consumer demand. So we're focusing on that a little bit more as a transition technology. But fundamentally no real change. And if you look at the right-hand side of that chart, BEV available on all models by 2030, 100% sales, zero tailpipe emissions in '36 and net carbon zero in '29 remain exactly as they were beforehand.	Something's coming, Range Rover Electric it is coming. And we're doing it differently, this is not a BEV which is going to get sold as a Range Rover. This is the Range Rover with a BEV powertrain. And BEV happens to give the exact combination of power, quietness and serenity that is perfect for the Range Rover Brand. So, this will be the top end of Range Rover. This will not be any other thing than probably the best and best performing Range Rover that you can get. We have opened a waiting list for this vehicle as of earlier on today, there are 33,000 people who have signed up to that waiting list.	The focus is on driving up the EV penetration to >15% in the portfolio from the current 12%.
	We've also put up more than 150 EV dedicated support centres across the country, which are helping manage the help of – health of all these vehicles proactively. On Evs, of course the overall volumes continue to be strong, delivering almost 21% growth. This is not enough for us and we will be stepping this up further. As the new cars come in, the networks increase, charging networks go up. So the task on hand as far as EV is concerned, is squarely to develop the markets. And you would see us intervening in this in a complete 360-degree manner, which we'll be more than happy to talk about subsequent fellowship.	And despite all the investment we are making in EV, the business is now comfortably profitable and doing well. On the EV side, we are continuing to improve our profitability. You will notice that. This is a quarter, we also took a price cut to pass on the benefits of the battery price reduction, some of them. And that's the reason you will see the EBITDA starting to increase now at 1.1% after we remove the PD expenses. Mainly CNG and EVs contributed to significant growth in the last financial year.	There are questions regarding EV demand slowing down in developed markets, but the company does not see any such change in trend, as sustainability targets need to be met by 2030 in most geographies
	Coming to bright spots in the industry, if you really see the growth rates in CY '23 to understand the trend of different powertrains, while the overall growth I said for calendar '23 for the industry was 8%, CNG grew by 25% and EVs nearly doubled at growth rate of about 95% to 100%. And I think this trend is likely to continue. Launch of Punch EV has been taken well in the market and I think this is going to help us drive EV sales going forward. The only delta which is compared to earlier, that is there is the	EV volumes grew by 48%; also, we crossed the milestone of 1.5 lakh EV production cumulatively since the time we started selling EVs. As I mentioned about CNG and EV volumes in terms of number it has grown by 55% and 70% respectively in a market which has grown otherwise at 8.6%.	

Company	Q3FY24	Q4FY24	Our observations
	whole focus on EVs to step up the market, develop the market and drive portfolio penetration to 15% plus from the current 12%.		
Renault	I confirmed that we are going to reduce cost of EVs by 40%, thanks to Ampere. For ICE and hybrid cars, we will achieve 30% cost reduction by 2027. Ampere on the one end, this is our EV and software champion, tailored to outpace the EV pure players in the race towards EV, ICE price parity, and Power & Horse on the other end generating cash, de-risking the Group, racing to reinvent the ICE technology through smart hybridization, synthetic fuels and ultra-low emission solutions.		Focus on reducing EV costs.
	Now, we are developing the new EV Twingo in around two years. All these efforts are boosting Renault Group's capital efficiency. So, we'll achieve over 30% Roche by 2025.		
BMW	BEVs, along with our models in the upper premium and luxury segment, are already our biggest growth drivers. Last year we sold more than 375,000 all-electric vehicles. And this year, once again, our fully electric vehicles should see significant double-digit growth. We will soon have sold more than one million BEVs worldwide, including plug-in hybrids. We already passed the milestone of two million electrified. This dynamism is reflected in our share of the global BEV market. At 4.1%, it is already significantly higher than our share of the total global market, which is at 3.3%. We still expect half our deliveries to be all-electric before 2030.	And of course, we have more BEVs, and of course we have fantastically a good upper segment growth which is more than 20%, which are really helping. In the year 2025, and that is what we are preparing for, and that is mostly forgotten, we have the first introduction of the next step of CO2 reduction for European new car fleets by minus 15%. And that is only possible if you increase your level of battery electric vehicles, emission-free vehicles. And since the industry in China is growing, we need additional capacity for the future, specifically because we currently increase our market share on the BEV side. I repeat that, in the first quarter our BEV sales in China grew by 18%, the average market grew only by 15%. So, our ambition is there to keep or even increase the market share.	Strong EU ESG regulations giving a push to electrification. BMW has higher share of BEVs vs. competitors. The company is pushing for more BEV market share in China. However, pricing of Chinese Evs continues to be increasingly competitive.
	We continue to prudently steer our BEV ramp-up in line with differentiated demand in global regions and we have been successful	But that is a very, not robust, but there is a lot of multi-sourcing underway that we will always have other options to do. There is no major insourcing besides on the EV side. BMW Group is committed to technology openness and that, of course, includes PHEVs. And I think the range of PHEVs, this is a very individual discussion. What is right? This is a matter of cost effectiveness.	
Mercedes	The xEV share is expected to be in the range of 6% to 8%, with the eSprinter 2.0 being available in the markets in 2024.	On the xEV share, we confirmed the guidance at 19% to 21%. Be aware our consolidated smart sales are running out since the new smart is not part of the reported sales figures anymore. We also protect – want to protect margin, and that's why I would say we rather see an EV share globally, which you see, which is rather stable at 19% to 21%.	Investments are ongoing towards EV-fication.
	In a market like the United States, we actually had the highest share of EVs of any foreign brand. We also made a tactical decision last year to open up the Tesla network in North America through an agreement with them, that will come into fruition for all the Mercedes EV users as of the middle of this year. So, a lot of effort taking care of the customer.	In terms of the investments for the EVs, let me be very clear, we do not slow down the investments on the EV side, despite some doubts in terms of the pace of transitioning. We don't take a tactical approach here. We keep the strategic focus in terms of investing into the EV product.	No tactical approach to slowdown in EV investments despite the doubts of EV transition pace slowing down.
	through EU7, China7, and the emissions laws in the United States, primarily California, we are updating all of our relevant ICE powertrain combinations for the 2027 timeframe. But the BEV investment profile for us is pretty clear and we see definitely the potential for the investments to come down over time. So, confirmed, not for 2025, but for the second half of the decade.	We are in a situation right now where we do not have EV offerings in all important segments of the market. Here I look very much into 2025 and then further into 2026 when MMA comes to market, which obviously will have a much larger, much broader offering in terms of EV vehicles in the entry segment. We are very confident that they are going to meet customer expectations towards, I mean, Mercedes products in the years 2025 and 2026 and therefore we are going to build a curve on the EV share, not only in China	

Company	Q3FY24	Q4FY24	Our observations
		but also in the rest of the world with these products to come.	
Boeing	Our core business remains solid, representing 60% of our revenue and performing in the mid to high single-digit margin range. The demand for these products is very strong and we need to execute, compete, and grow these offerings. Nothing has changed on the demand front and the backlog is strong and growing. The demand for these products is very strong and we need to execute, compete, and grow these offerings. Our investment-grade credit rating continues to be a priority and we're developing–- deploying capital in line with the priorities we've shared previously, invest in the business and pay down debt.	Demand across our portfolio remains incredibly strong. Our core business, representing about 60% of our revenue, is seeing solid consistent performance in the mid to high single-digit margin range with strong demand across the board. Overall, the defence portfolio is well positioned. As seen in the initial FY25 presidential budget, there's strong demand across the customer base. The products are performing in the field and we're confident that our efforts to drive ex-use stability will return this business to performance levels that our investors recognize. Our backlog of nearly USD 530bn speaks to the breadth of our portfolio, and this demand backdrop underpins our commitment to drive long-term results,	Demand for aircraft is strong, including for defence purposes.
Airbus	Our full year 2023 capex was EUR 3.1bn and this reflects the investments in enhancing and upgrading our industrial system, and to support our ramp-up, we expect our capex to continue to increase in 2024, however, at a somewhat lower pace	The A400M for information continued to weigh on our free cash flow and our Q1 2024 capex was minus EUR0.5bn and that reflects the investments in enhancing and upgrading our industrial system. To support our ramp up, we expect our capex to continue to increase in 2024, yet at a slower pace relative to previous year.	Investments ongoing towards enhancing and upgrading industrial systems.
	As we progress in 2024, we remain fully committed to serving our customers and strong demand for our modern, fuel-efficient commercial aircraft and working closely with our global supply chain partners as we ramp up across all our programs with safety and quality at the heart of all that we do in a new organizational setup. To support our increasing production rates, we'll continue to invest, modernize and adapt our global industrial system.	Basically, we remain focused on ramping up across all our programs as we are fully committed to serving our customers and the strong demand for our products.	

Source: Company data, I-Sec research

Software-defined vehicles – spearheading automotive metamorphosis

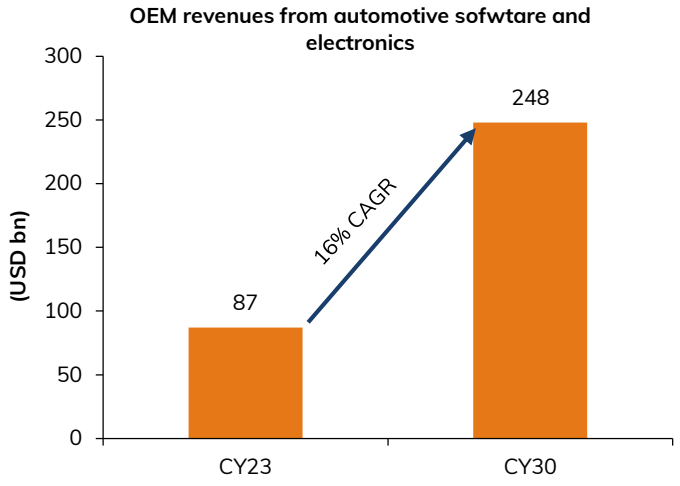
Globally, investments are on the rise in ACES Automated, connected, electrification and shared mobility. Moreover, swiftness of transition to EV has increased – need for speed and complexity. Electrification is already the top focus for the automotive industry, as sales of EVs have increased by more than 55% annually in 2022 vs. 2021 and the emphasis to meet carbon targets intensifies. Further, incentivisation policies by governments across the globe are accelerating the transition towards EVs.

Cars are no longer solely mechanical structures; they are becoming tech products. This is causing the merging of two different domains i.e., mechanical and software. And the result is transition towards software-defined vehicles. This transition will lead to new collaborations between automotive and technology/software companies.

Software in vehicles has been around since 1970s. However, the intensity of softwarisation of vehicles has gathered significant pace recently. Software defined-vehicles is a major trend that will likely catapult the auto industry towards USD 650mn value by 2030. Software-defined vehicles are only beginning to emerge and shall likely constitute 15–20% of the automotive value by 2030. OEMs' revenue from software and electronics is set to treble by CY30 and the supplier market for the same will likely double by CY30.

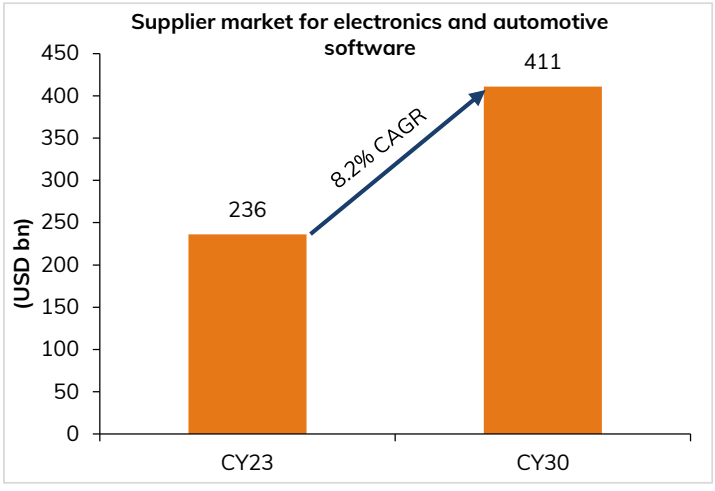
OEM revenues from electronics and automotive software is expected to grow ~3x from USD 87bn in CY23 to USD 248bn in CY30 (per BCG). On similar lines, the supplier market for electronics and automotive software is expected to grow ~2x, from USD 236bn in CY23 to USD 411bn in CY30.

Exhibit 8: OEMs revenue from software and electronics to triple from now till CY30



Source: BCG, I-Sec research

Exhibit 9: Supplier market for software defined vehicles is set to double between CY23 to CY30

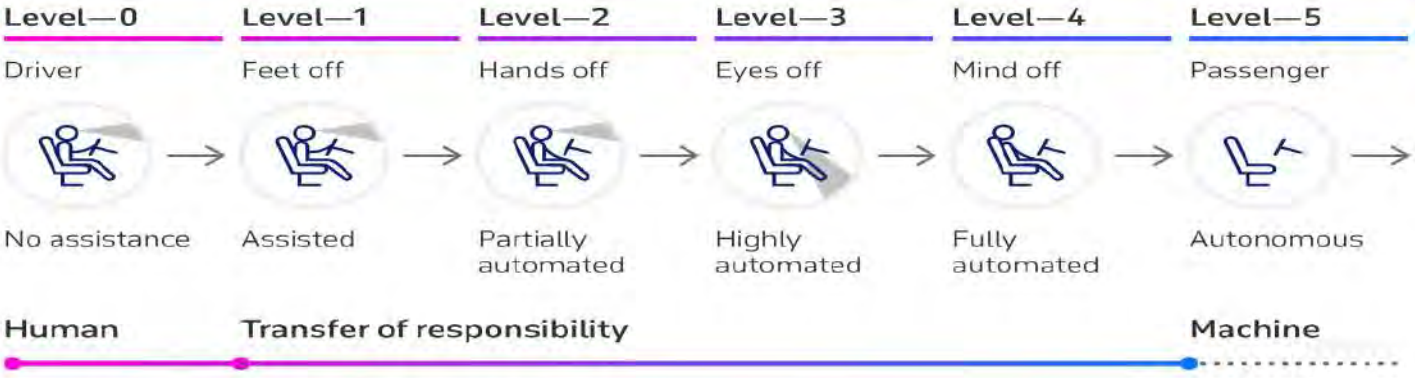


Source: BCG, I-Sec research

The features that customers are looking for in software-defined vehicles are: comfort-convenience, safety, connectivity, a modern dashboard and driver assistance. The demand for these features is causing OEMs to move from a hardware-defined architecture to a software-defined one. Hence, vehicles nowadays are more of software on wheels. Apart from the hygiene features, SDVs provide customers with OTA (over the air) updates and improve and upgrade vehicles on the go.

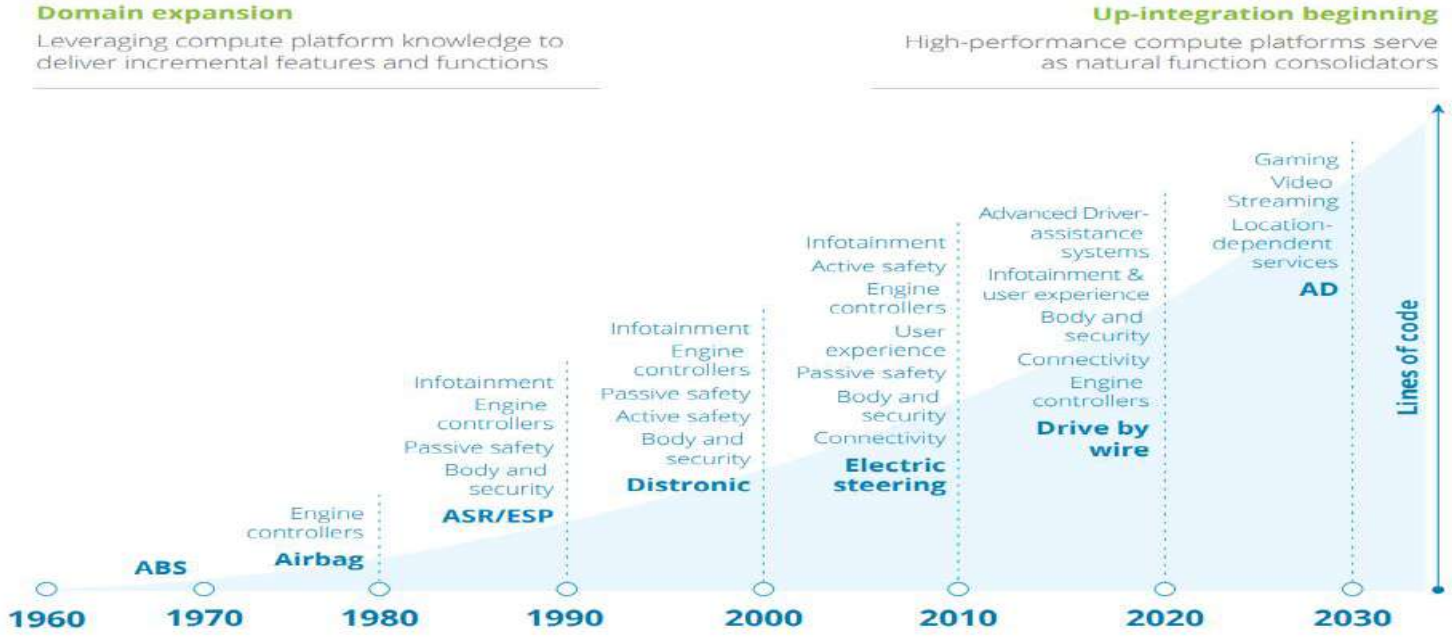
The number of lines of code per model of vehicle is expected to grow exponentially given softwarisation of vehicles. The shift will be even more rapid as the automotive industry moves from L1- L5 (see Exhibit: 12). Per Volkswagen, the number of lines of code in average luxury car/self-driving is expected to reach 1bn for a level-5 autonomous vehicle. In present times, a typical new model vehicle comes with 100-200mn lines of code.

Exhibit 10: AI-assisted driving autonomy levels



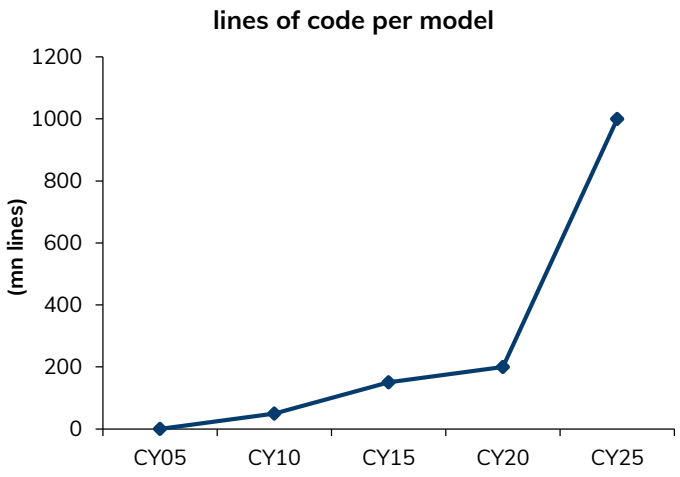
Source: itransition

Exhibit 11: Increasing software share in automotive components



Source: Company data, I-Sec research

Exhibit 12: Exponential growth in number of lines of code per model; level-5 autonomous driving will take ~1bn lines of code



Source: Volkawagen, I-Sec research

Exhibit 13: Modern vehicles with car software, cloud connected infotainment systems and OTA updates have high degree of softwarization

	mn lines of code
Control software to run a US military drone	3.5
Boeing 787	6.5
Google Chrome browser	6.7
Android operating system	13.5
Large Hedron Collider	50
Facebook (excluding backend code)	62
Modern Vehicle	100
All google services	2000

Source: Visualcapitalist.com, I-Sec research

Auto-tech – a hot spot for M&As

ER&D services business has high entry barriers, lofty switching costs and protracted gestation for new entrants to scale to high-value client relations. Thus, M&A is a well-suited route to participate in fast growth offered by the automotive ER&D segment. Indian large-cap players, namely Infosys and HCL Tech acquired 'In-Tech' and 'ASAP', respectively, to leverage auto ER&D growth. These acquisitions are rife at a time when IT companies are seeing growth slow. Infosys made its biggest acquisition when it agreed to spend USD 480mn to buy In-Tech, a German automotive ER&D firm. In-Tech reported USD 180mn in revenue last year.

- HCL spent USD 260mn last year (2023) to buy ASAP Group, a German automotive engineering services company.
- Accenture acquired ESR Labs in 2020, a Munich-based company that embeds software into leading German suppliers and car brands. This acquisition is expected to improve traction in Accenture's Industry X.0 capabilities. The company offers solutions to update the code in the cars remotely, helps clients develop connected cars.
- In 2023, Accenture acquired Umlaut, which is an engineering, services and consulting firm headquartered in Germany. This acquisition also deepens Accenture's capabilities in Industry X.0.
- Capgemini acquired Altran (a leader in global engineering and R&D services) in 2019 for a total consideration of EUR 3.6bn. Altran specialises in ER&D, aeronautics, automotive, space, defence, naval, telecom and media, rail, infrastructure and transportation.

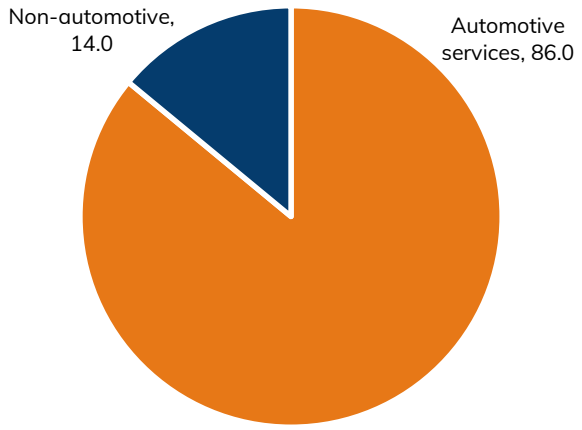
Investment rationale

Right place, right time: Opportune time for automotive-heavy ER&D

In FY24, the ER&D sector showcased significant growth, making a meaty 48% contribution to total exports, per NASSCOM. Needless to say, the sector has been expanding rapidly, asserting its importance and potential.

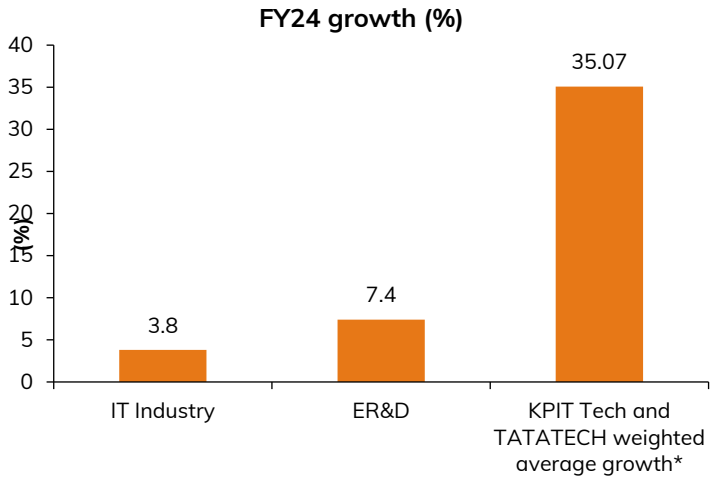
Auto ER&D is the industry's fastest growing sub-segment. In the automotive sector, the momentum is in favour of electrification, hybridisation and software-defined vehicles. Per NASSCOM's Annual Strategic Review, 2024, ER&D is the fastest-growing segment for the industry in FY24, growing at 7.4% YoY, as against net industry revenue growth of 3.8% YoY. Moreover, KPIT, a pure automotive engineering company that posted 40.4% YoY growth in FY24, has guided for 18–22% organic and 40% overall revenue growth in FY25. TATATECH, with 86% revenue from automotive, offers entry into an opportune exposure to the industry's fastest growing sub-segment of auto engineering services.

Exhibit 14: Automotive forms highest portion of revenues for TATATECH (%)



Source: Company data, I-Sec research

Exhibit 15: NASSCOM IT industry, ER&D and KPIT-TATATECH FY24 revenue growth: Best growth was displayed by automotive-heavy KPIT and TATATECH

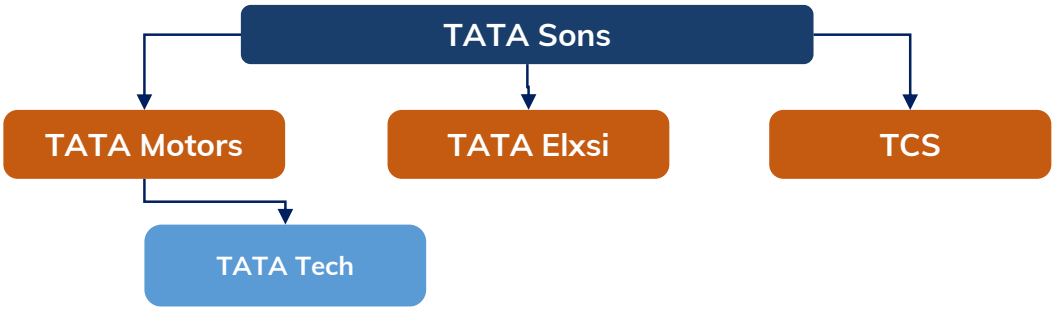


Source: Company data, I-Sec research | * TATATECH growth is ex-VinFast

Ownership structure creates special advantage

TATATECH stands out in the tech industry due to its unique ownership structure, providing it with a distinct competitive advantage. With Tata Motors as its largest client and promotor, TATATECH enjoys a strategic partnership that helps bolster its market position and stability. Equity and commercial client duality of its relationship with Tata Motors enables TATATECH to participate in development and innovation programs of Tata Motors and JLR. Unlike its peers, including Tata Elxsi and TCS, which are Tata Sons-owned names, TATATECH benefits from a symbiotic relationship with major players in the automotive industry, leveraging opportunities for growth. The relationship not only ensures steady stream of revenues, but enhances TATATECH's resilience and credibility in the market.

Exhibit 16: TATATECH has direct link to Tata Motors



Source: Company data, I-Sec research

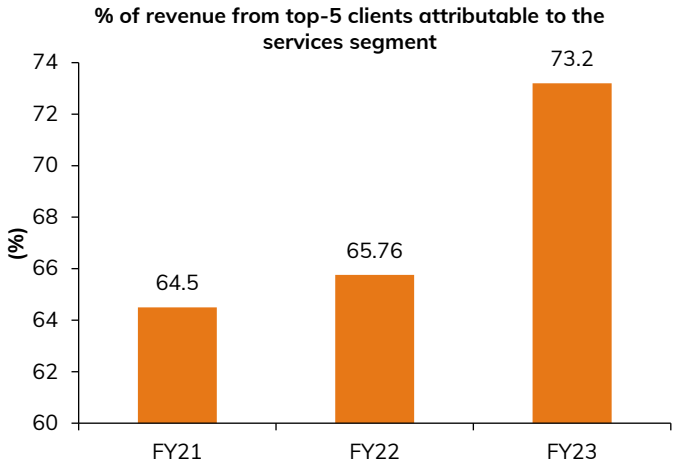
Anchor clients: The crown jewels

TATATECH's success depends on maintaining relationships with its top long-standing clients. The top-5 include: Tata Motors, JLR and VinFast. Separately, Tata Motors and JLR together form the anchor clients for TATATECH.

Here, we must flag that in ER&D, having high exposure to top clients is a sign of: 1) client vendor trust; 2) future scope for increasing wallet share within accounts; 3) high surety of future engagements with the particular account.

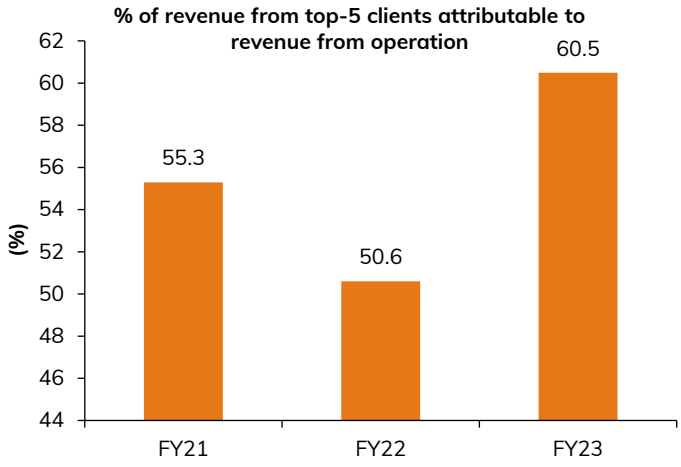
Over the next couple of years, the share of anchor and top-5 clients is likely to increase for TATATECH's scope of work within Tata Motors, Air India and JLR increases.

Exhibit 17: Increasing share of top-5 client in services segment



Source: Company data, I-Sec research | N.B.: Company has stopped disclosing top clients' concentration in FY24

Exhibit 18: Increasing share of top-5 client in overall revenue



Source: Company data, I-Sec research | N.B.: Company has stopped disclosing top clients' concentration in FY24

With Tata Motors: TATATECH is deeply involved in all the production processes of Tata Motors. Most recently, TATAECH has collaborated with Tata Motors on their work on smart manufacturing solution for their Sanand plant. TATATECH is responsible for architecting and deploying a solution integrating PLM, ERP, MES and IoT systems. This solution has helped Tata Motors increase its annual production capacity by 300k units. TATATECH is helping Tata Motors make the production process more agile, and as a result, setting industry-leading timelines. TML engaged TATATECH to convert their existing ICE vehicles to EVs (Tata Tigor EV, launched in 2021; and Tata Tiago EV, launched in 2023). The projects involved complete ownership for design, packaging and integration of EV components such as battery, motor and charging socket.

With JLR: TATATECH is deploying S4 HANA at JLR production facilities. TATATECH is also deeply involved in all the production processes at JLR.

With VinFast: TATATECH has worked with VinFast on: Vehicle architecture, CAE (Computer Aided Engineering), Virtual Validation – including CAE virtual simulation of components, sub-systems, systems and full vehicle analysis for durability, fatigue, crash and visual simulation (digital mock-up and analysis), electrical architecture system design, circuit schematic design, simulation, wiring harness 3D routing, diagnostics, electrical and electronics integration and supplier management.

TATATECH was involved in the production and design of two EV models. Now those two vehicles have moved to launch process, for which TATATECH is still collaborating with them.

Marquee client portfolio

TATATECH has an impressive client roster, consisting of 35 OEMs and 11 new energy vehicle companies. The key point that reduces the concentration risk is the fact that majority of the top-5 companies have a contract tenure of three–five years, with an option for renewal post that. TATATECH's current clients include seven out of ten and 12 out of 20 automotive ER&D spenders. The top client portfolio includes marquee names such as: 1) Anchor clients – TATA Motors and JLR; 2) Tier-I OEMs – Airbus, McLaren, Ford, Honda, Cabin Interiors and Engineering Solutions, ST Engineering Aerospace and Cooper Standard; and 3) New energy vehicle companies such as VinFast, NIO and Rivian. A leading American EV and autonomous company which designs, manufactures and sells battery electric vehicles, also outsources digital engineering work to TATATECH. TATATECH is also the only accredited company under Tata Group to provide engineering services provider for Airbus

Exhibit 19: Client roster

Source: Company data, I-Sec research

Exhibit 20: Marquee client portfolio consists of anchor clients, tier-1 OEMs and new-energy-vehicle companies

Source: Company data, I-Sec research

Tata Motors' and JLR's robust capex plans – downstream positive impact on TATATECH

Tata Motors and JLR – key anchor clients of TATATECH – have ambitious capex plans. JLR has maintained its capex plan of investing GBP 3bn per year till 2029 (GBP 15bn over five years). As part of JLR's 'Reimagine' strategy, to grow its presence in luxury EV, JLR has committed systematic and continuous investments. This entails evolution of its existing platforms and architecture in a phased manner to: 1) Modular Longitudinal Architecture; 2) Electric Modular Architecture; and 3) Jaguar Electrified Architecture. Similarly, Tata Motors plans to increase its portfolio of EVs. This will likely have a downstream positive impact on TATATECH.

Exhibit 21: JLR to collaborate deeply with Tata Group and NVIDIA

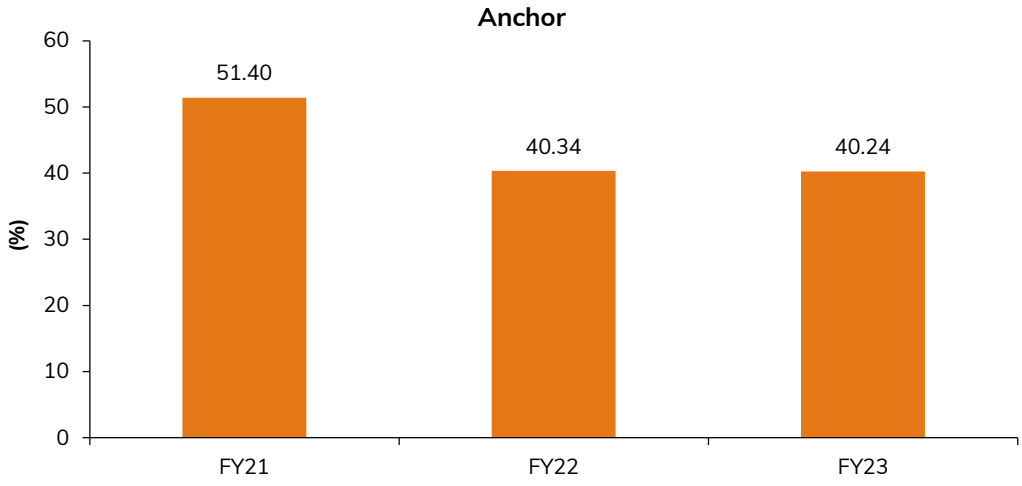
Source: Company data, I-Sec research

Exhibit 22: JLR investment areas

Source: Company data, I-Sec research

TATATECH's anchor client revenue share has gone down from 51% in FY21 to 40% in FY23. However, **the share of anchor clients is likely to increase in the next couple of years, as TATATECH's engagement with Tata Motors, JLR and Air India expands.**

Exhibit 23: Anchor client revenue share



Source: Company data, I-Sec research | Company has not disclosed FY24 data for Anchor clients

The list of marquee clients now includes another noteworthy OEM of repute – BMW. TATATECH announced a JV with BMW in Apr'24. The motive of this JV is to create a software development hub in India – cities of Chennai, Bengaluru and Pune – to deliver software-defined vehicles and automotive software for BMW's digital transformation solutions and premium vehicles. This is also expected to fill the gap left by VinFast's ramp down (discussed in next section).

Service portfolio on a desirable pivot

TATTECH's service portfolio is evolving from mechanical oriented embedded electronics to SDV, supported by top clients and new energy startups. In addition to mechanical design and support, TATATECH has also developed capabilities in software domain into segments such as: 1) OTA (over the air) updates; 2) ADAS (Autonomous Driver Assistance Systems); 3) embedded electronics; 4) EV system design; and 5) CAE (Computer Aided Design).

gAI (Generative AI) is also emerging as a significant segment where TATATECH is capitalising on demand. gAI is revolutionising the manufacturing segment. TATATECH is currently building solutions around using gAI to enhance recommendations in in-vehicle infotainment systems. In automotive, there is increasing demand for AI-powered, autonomous driving and connected services for next-generation vehicles.

TATATECH is ramping up its capabilities in software-defined everything, autonomy and cybersecurity. Further, it has budding partnerships with Arm, Intel and Foxconn.

The company's portfolio exhibits a strategic pivot from traditional mechanical engineering services to fast growth digital engineering services. As per Zinnov, the global share of digital technologies in automotive ER&D spend is expected to grow at a CAGR of 16% from CY22 to CY26, with an expected increase from 26% of the total spend to 36% in the same period.. The transition underscores a forward approach aligning with market dynamics. By capitalising on the strategic relation with its largest client and EV startups, the company is poised to capitalise on the burgeoning demand trend. This shift enhances the company's competitive edge and positions it to be a key player and participate in industry growth. This strategic realignment underscores the company's innovation and adaptability, bolstering its long-term growth prospects.

TATATECH poses expertise across the value chain in the automotive vertical, as depicted in the exhibit below.

Exhibit 24: Expertise across all major sub-segments within automotive

S. no.	Services Capability	Client
1	Concept Design	PoleStar
2	Teardown and benchmarking	Tata Motors
3	Vehicle Architecture	VinFast
4	Body Engineering	A Chinese new energy vehicle company
5	Chassis Engineering	McLaren
6	CAE Virtual Validation	VinFast
7	ePower-Train	A British tier-I supplier
8	Electrical and Electronics	VinFast
9	Manufacturing	McLaren
10	Build and Test	Tata Motors
11	Launch	Polestar, VinFast

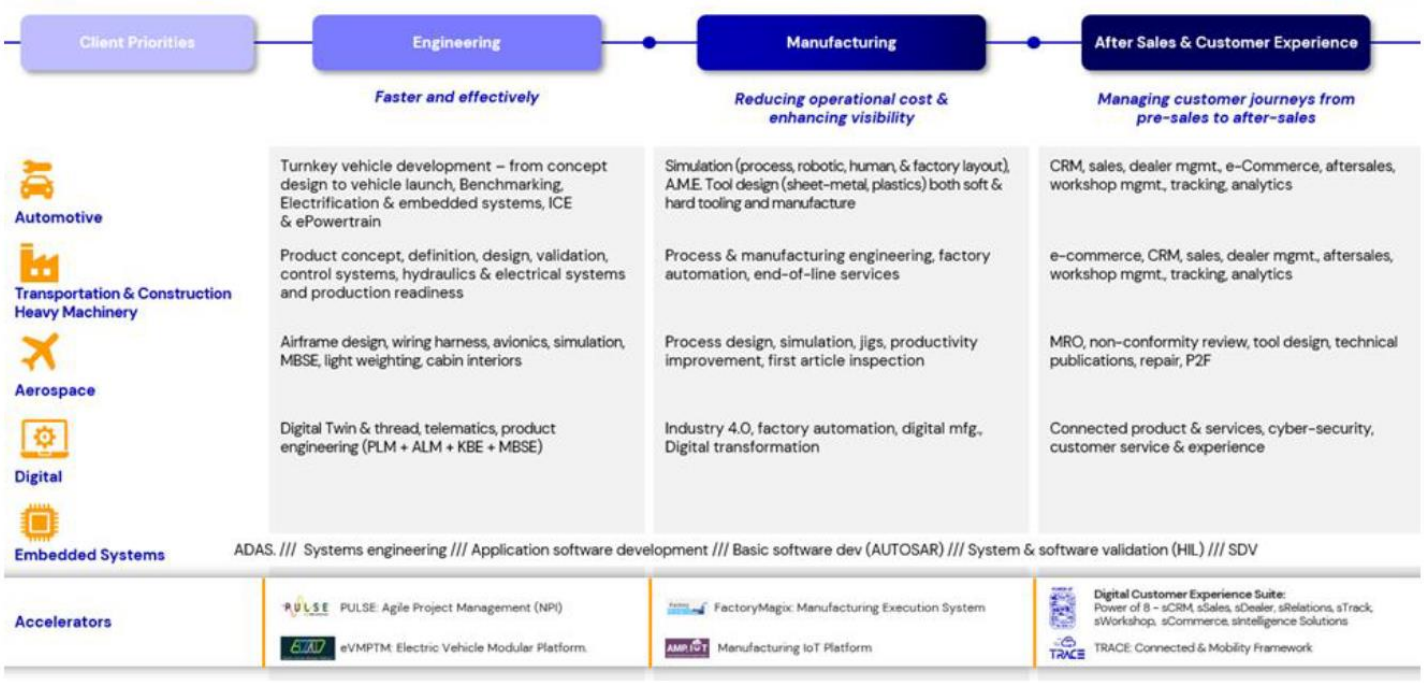
Source: I-Sec research, Company data

Exhibit 25: TATATECH's evolving services portfolio

Reference	Sr. No.	Client Description	Services Classification
Case study	1	leading Swedish global premium car manufacturer	Mechanical
	2	JLR	Both
	3	A North-American EV start-up specializing in sport utility vehicles, and pick-up trucks	PLM and ERP system Integration
	4	TML	
	5	Leading automotive tier-1 supplier	PLM and ERP system Integration
	6	Italy based automotive supplier	ADM contract till 2026
Service segments	7	Swedish luxury vehicle manufacturer	Mechanical
	8	TML	Mechanical
	9	VinFast	Mechanical
	10	Chinese new energy vehicle company	Mechanical
	11	British luxury automobile manufacturer	Mechanical
	12	VinFast	Mechanical
	13	VinFast	Digital Engineering
	14	British tier- 1 supplier	Digital Engineering
	15	British premium automotive OEM	Digital Engineering
	16	British luxury vehicle company	Mechanical
	17	TML	Mechanical
	18	TML	Mechanical
	19	TML	IT Services
	20	TML	IT Services
	21	Swedish luxury vehicle manufacturer	Mechanical
	22	Chinese new energy vehicle company	PLM and ERP system Integration
	23	North American new energy vehicle company	PLM and ERP system Integration

Source: Company data, I-Sec research

Exhibit 26: TATATECH services portfolio



Source: Company data, RHP, I-Sec research

Favourable vertical mix: Services-heavy mix – better margin profile

Segment-wise, **Services** formed the largest part with 78% share in FY24 revenue and the rest 22% was **Technology Solutions.**

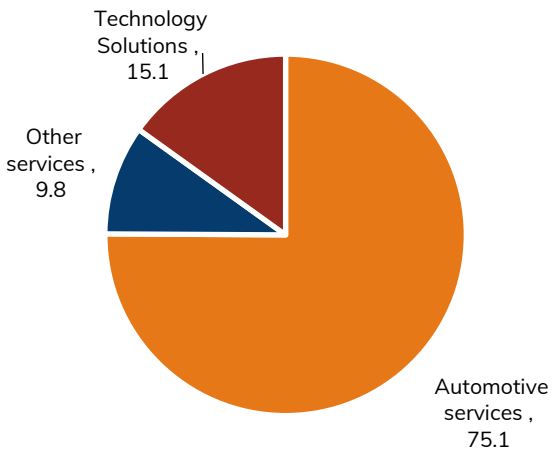
Both automotive and aerospace come under **Services,** which are the major verticals with anchor clients. Automotive (75.1% in 9MFY23) is the anchor vertical with marquee clients – Tata Motors, JLR and VinFast. TATATECH has deep capabilities in automotive sub-segments of design, infotainment systems and cloud native architecture for software-defined vehicles**. Within Services, TATATECH is also gaining opportunities in aerospace (currently, forms low single digit share of services) and is a fast-growing segment.**

Within **Technology solutions** (22% of revenue in FY24) there are two parts – education and VAS (Value Added Services), education business is gaining momentum. The product business is driven by value added reseller partnerships with PLM software vendors. This business segment has positive seasonality in the fourth quarter, as US customers carry out budgeting at the end of the year and renew maintenance contracts. The company has a robust pipeline in the education business. Sequential INR growth for Technology Solutions business was at 6% in Q4FY24, driven largely by the education business.

Technology solutions growth has been lumpy and dependent on seasonality. Over the last two quarters, technology solution has seen healthy growth driven by work in the education segment. The education segment work is centred around training the ITI engineers in collaboration with Indian state governments. This business is going to scale up in the next three–five years with education services expanding from the state government level to enterprise level.

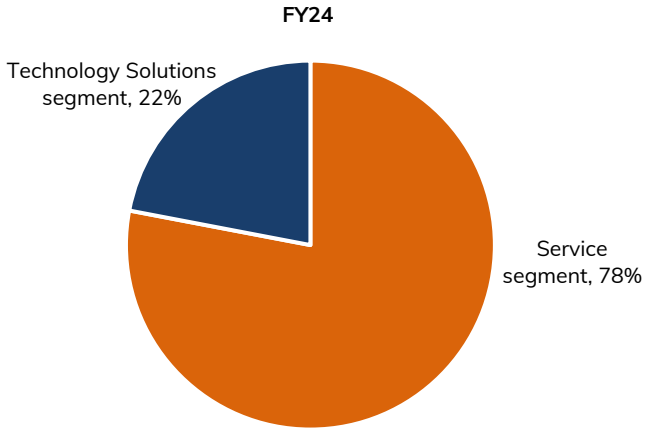
The vertical mix is favourable, as the mix is services heavy (automotive + aerospace), which has a better margin profile (31.5% in FY24) than the smaller portion of technology solutions (17.5% in FY24). On the other hand, the smaller technology vertical is also growing swiftly driven by the education segment.

Exhibit 27: Favourable vertical mix 9MFY23



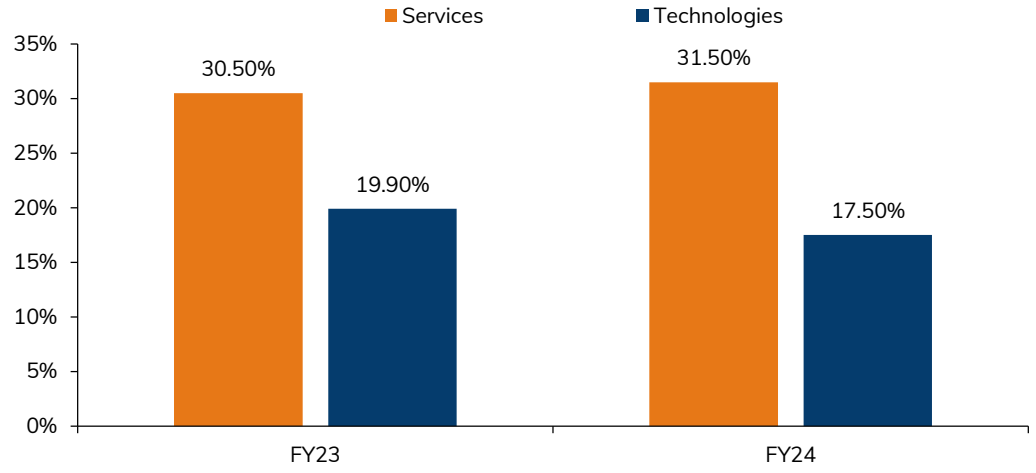
Source: Company data, I-Sec research

Exhibit 28: Services segment forms the largest pie – seeing growth slump currently (FY24)



Source: Company data, I-Sec research

Exhibit 29: Segmental margin



Source: Company data, I-Sec research

On track to deliver growth despite client specific ramp-down

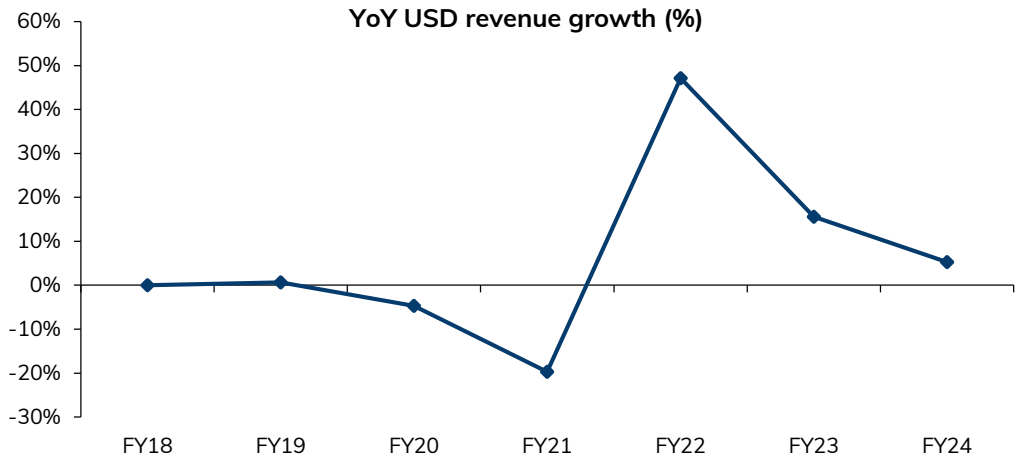
YoY USD growth has been fluctuating for TATATECH. VinFast has been one of the top-5 clients since 2018; also is one of the top ER&D spenders globally and is a new energy vehicle company.

TATATECH saw a marked ramp-down in VinFast revenue in FY24 (down 44% YoY), forming 11% of FY24 revenue, as the company pivoted from developing new product to selling the product. The ramp down began in Q3FY24.

Excluding VinFast, services revenue was up a robust 10% QoQ in Q4FY24. TATATECH has completed development of two EVs for VinFast and is now pivoting towards launch support activities. The ramp down is expected to bottom out by Q2FY25 and VinFast is likely to then contribute a small portion to TATATECH revenues (<5%). Management is confident of strong demand in FY25 despite VinFast ramp down. We forecast 13% USD revenue growth in FY25.

Silver lining from the ramp-down: VinFast announced to set up an integrated EV plant in Tamil Nadu with capacity of producing 150,000 eVs. This opens up opportunity for TATATECH to leverage its existing relationship with VinFast and get additional projects from Vinfast's India EV plant setup. Also, TATATECH's platform-based work on VinFast has provided positive word of mouth and helped it bag another project with a French automotive OEM.

Exhibit 30: USD YoY revenue growth – ramp up in FY22 came from VinFast project and growth normalization played out in FY23



Source: Company data, I-Sec research

Aviation growth gathering momentum

Air travel is rebounding post covid-19 and it is an ongoing journey. Post covid, the demand for aircraft has exceeded industry's ability to supply. Aerospace companies are also conducting research in areas of digital thread, sustainability (i.e., building aircraft with lighter materials for fuel efficiency), improving manufacturing throughput and autonomous flight. There is increasing opportunity in aerospace across North America, India and Europe.

TATATECH's expertise in transportation is helping it get into adjacent domains such as aerospace and TCHM (Transportation and Construction Heavy Machinery). The company has already proved its mettle in the space with recognitions such as being ranked in the 'leadership zone' in the aerospace ER&D ratings in 2023 and 2021 by Zinnov Zones.

It has a set of marquee clientele in aerospace such as ST Engineering Aerospace, Airbus, Tata Group (Air India, TASL, Vistara). TATATECH is optimistic of expanding in aerospace and industrial heavy machinery, and aims to lift its contribution to 20% (from the current low single digit) in the next three–five years.

Tata Group

Tata Group's sway is increasing in aerospace. This will likely benefit TATATECH. There is increasing opportunity for TATA Group in terms of buying aircraft, in both commercial and defence spaces. TATATECH's current engagement with Tata Group is through TASL. TATATECH is currently in C295 engagement with Tata Group. Tata Group is on its way to expanding its aircraft fleet.

Airbus

TATATECH got accredited by Airbus around two years ago and is part of Airbus' EMES cube supply program (the program involves EUR 2bn annualised outsourced spend). Empanelment with a client of Airbus's stature holds high significance. This is because of the fact that in a space such as aerospace, safety, quality and compliance are of utmost importance. Hence, the Airbus empanelment is testament to deep trust that clients have on TATATECH's offerings. These relationships are typically cultivated over a long-time frame and its benefits are also reaped for a long time period. Airbus being one of the largest spenders in the industry, opens up large opportunities for TATATECH. The company begun discharging the Airbus orderbook in Jan'24 and has doubled its revenue from the account in Q4FY24 vs. Q3FY24. The work with Airbus majorly revolves around infrastructure support and manufacturing throughput. The Airbus opportunity is huge, considering there are currently 23,000 aircraft and the fleet is expected to double in the next 15–20 years (i.e., a minimum 1,150 aircraft to be added each year).

Next level aerospace growth in FY25

TATATECH has been working in the aerospace for more than a decade. Aerospace currently forms a single-digit share of its services segment. However, FY25 is expected to be a year that would likely mark an uptick in aerospace for TATATECH driven by ambitions of Tata Group and Airbus coupled with the rise in aircraft demand post covid.

Strong demand in aerospace: Aircraft manufacturers have been struggling to meet demand post covid and are dealing with order backlogs. The demand is strong across commercial as well as defence (attributing to the current geopolitical climate). Within commercial, there is demand for fuel-efficient aircraft.

Commercial aerospace: Air India (owned by Tata Group) is placing an order of 270 aircraft worth USD 100bn with Airbus and Boeing. TATATECH, given its relationship with Tata Group as well as Airbus, is expected to benefit as this order unfolds.

With Airbus, TATATECH is a vendor along with a total of 17 suppliers – to which a sizeable budget of USD 2bn has been allocated and is a part of Airbus' EMES cube. Also, TATATECH being the only accredited Tata Group engineering service provider with Airbus makes their positioning stronger. TATAECH will be helping Airbus automate its factories by implementing ERP, PLM and EMES so that all the data across the organisation is communicating seamlessly.

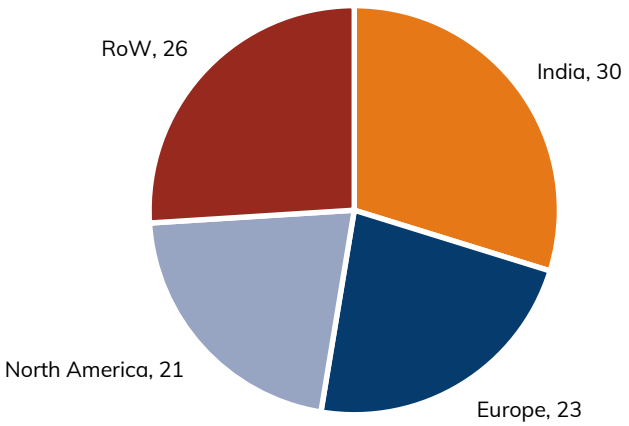
Defence aerospace: TATATECH is also present in the defence space with TASL (TATA Advanced Systems – sister company of TATATECH). TASL is collaborating with Airbus to manufacture and assemble medium lift tactical C-295 transport aircraft for the Indian Airforce.

These two opportunities will propel aerospace vertical's growth and the low base will add to growth optics. This opportunity is expected to extend over the next five–ten years and aerospace will form a sizeable share of the revenue pie.

Peculiar geography mix – largest exposure to China among Indian ER&D players

TATATECH has a lower exposure to traditional geographies i.e., US (21%) and Europe (23%). The portfolio is currently APAC heavy (26%). This is a result of presence in TATA Motors (India), VinFast (Vietnam) and TATATECH's subsidiary in China. Though the presence in China is miniscule as a % of revenue, the subsidiary allows TATATECH to work with Chinese new energy vehicle companies/startups (albeit limited) and get hands on access to cutting edge innovation in the field of EVs. This is of prime importance, as China is ahead of US and Europe in EV and autonomous vehicle technology as well as in support infrastructure which is evident from higher share of China in EV sales (China accounted for 69% of all EV sales in Dec'23) – *Source: IEA, RystadEnergy.*

Exhibit 31: APAC-heavy geography mix

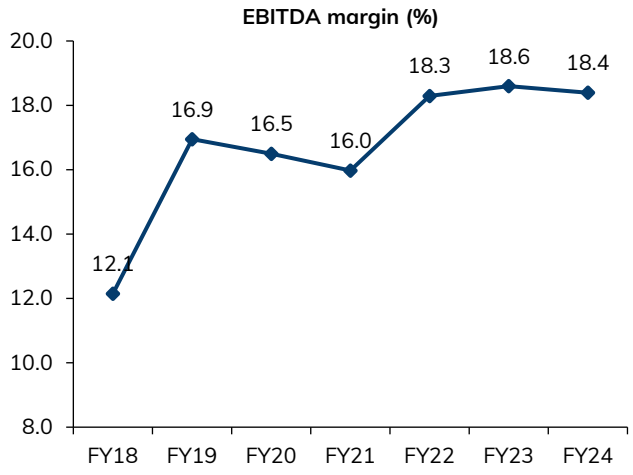


Source: Company data, I-Sec research

Operating metrics in place and improving

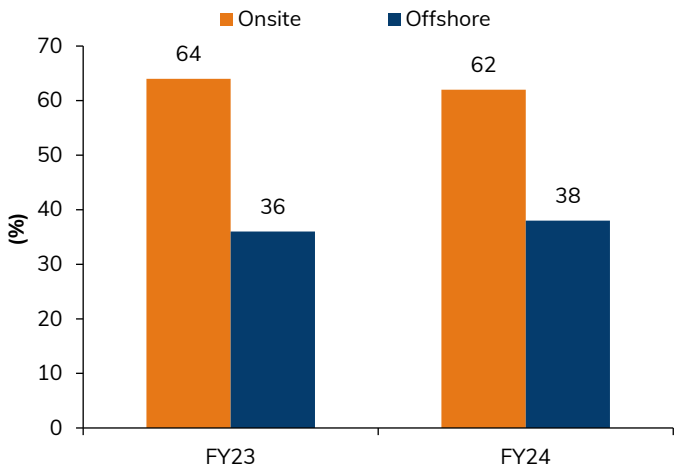
Though there have been fluctuations in the margin for the last ten years, the overall trajectory has been positive. This is led by improved offshoring. The company has 19 delivery centres across Europe, North America and Asia Pacific. The company is planning to cross 20% EBITDA margin target in the next three–four years by optimising levers of scale, pyramid optimisation and offshoring.

Exhibit 32: Margin trajectory stabilising



Source: Company data, I-Sec research

Exhibit 33: Led by improving off-shoring



Source: Company data, I-Sec research

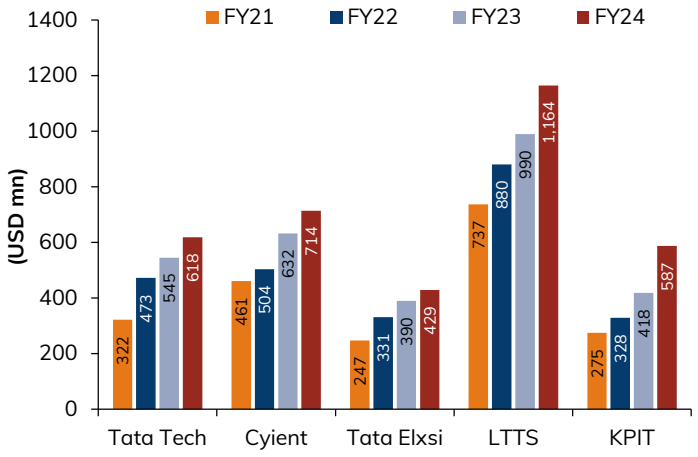
Exhibit 34: Globally distributed delivery centres

Source: TATATECH IPO PPT, as of Sep'23

Peer comparison: Right in the middle of Indian ER&D universe

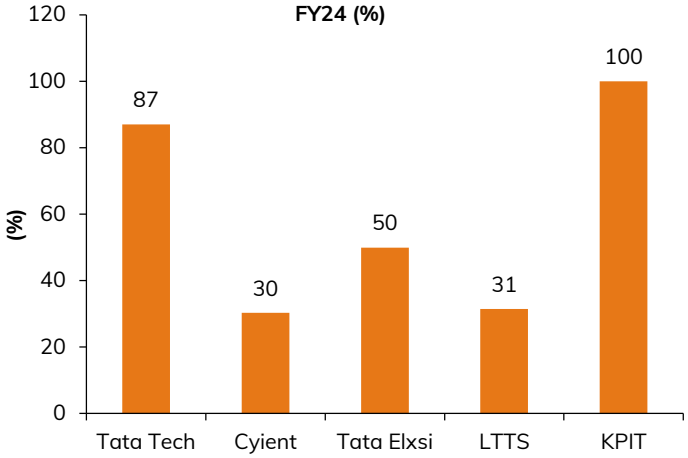
TATATECH fits in the middle of the roster of pure-play ER&D peers i.e., KPIT Tech, LTTS, TATA Elxsi and Cyient. It has high exposure to the rapidly growing automotive segment, but unlike KPIT's 100% exposure, which provides TATATECH some degree of risk mitigation. Although the EBIT margin stands lower-than-peers, TATATECH's EBIT margin has been stable and consistent across the last four years. The company was the growth leader in FY22 with YoY USD revenue growth of a whopping 47%. TATATECH's revenue has grown at a CAGR of 14.3% over FY22–24. Outside India, it competes with the likes of Bertrandt, Altran and Alten.

Exhibit 35: TATATECH is a mid-sized pure-play ER&D firm...



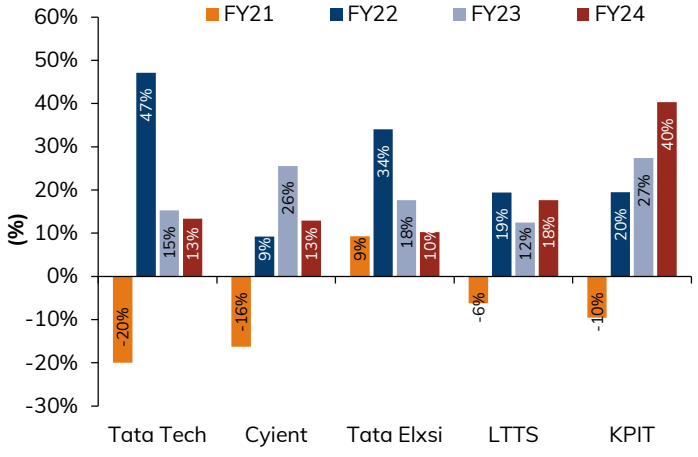
Source: Company data, I-Sec research

Exhibit 36: ...which provides good entry to leverage into the automotive rally; next only to KPIT



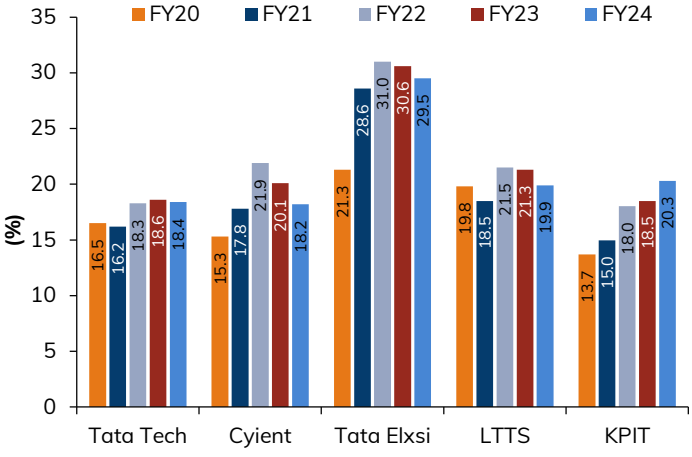
Source: Company data, I-Sec research

Exhibit 37: FY24 growth of TATATECH was weighed down by VinFast ramp down



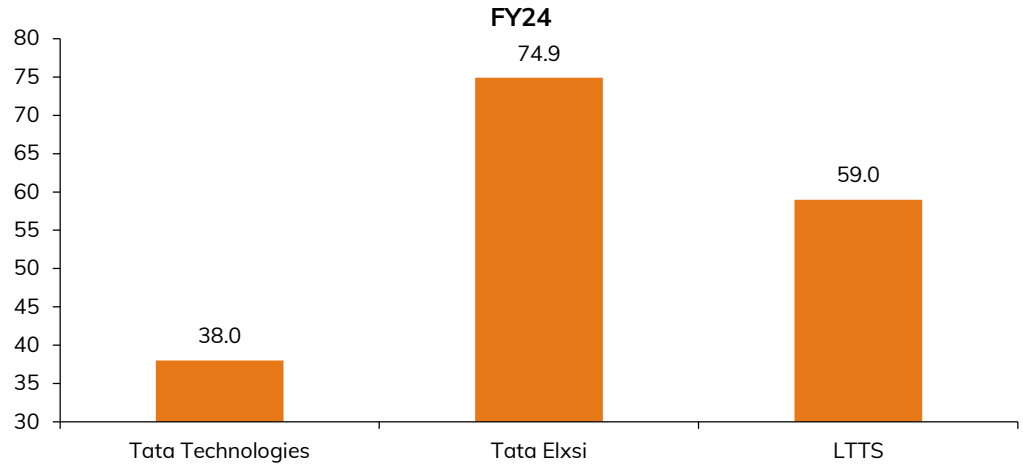
Source: Company data, I-Sec research

Exhibit 38: Most consistent margin performance vs. peers



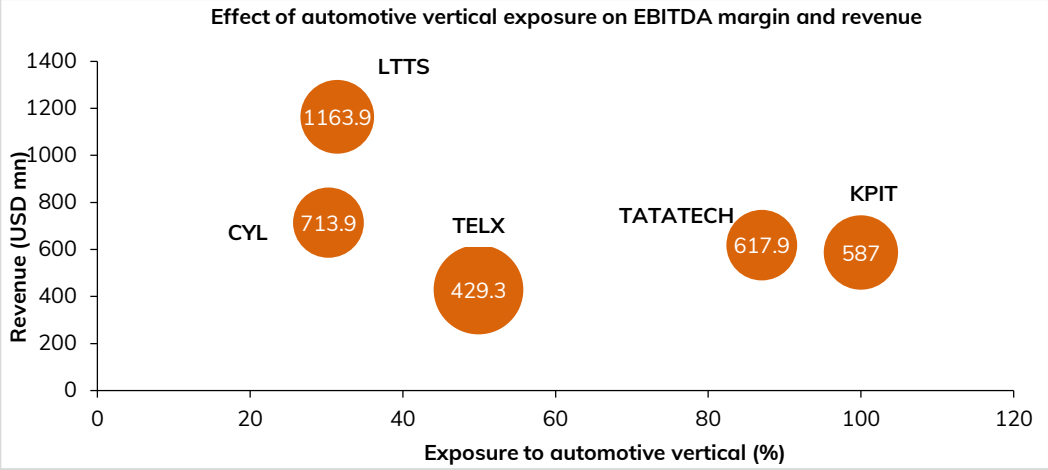
Source: Company data, I-Sec research

Exhibit 39: TATA Elxsi tops in offshoring; TATATECH has room for improvement



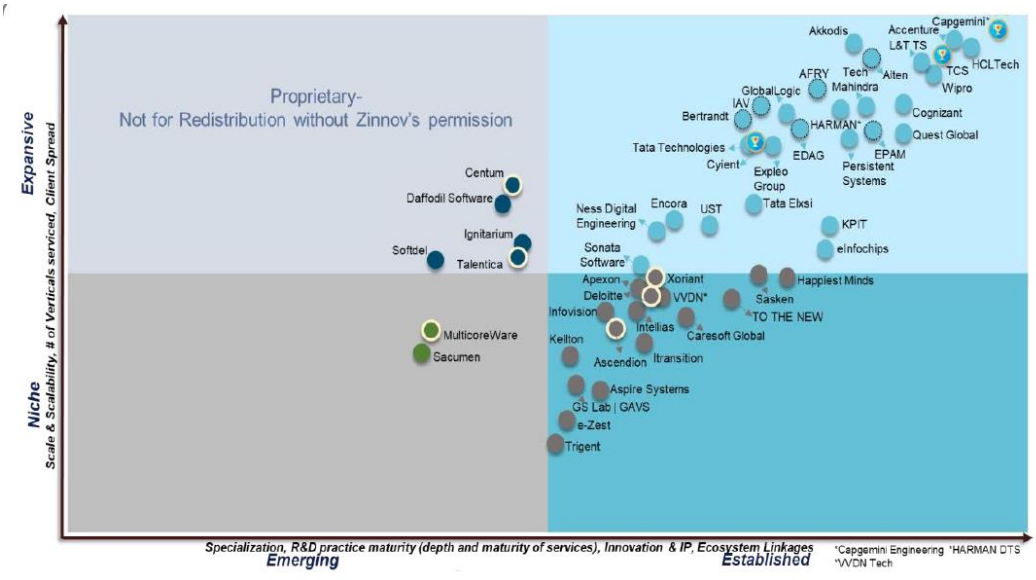
Source: Company data, I-Sec research

Exhibit 40: Comparative analysis of Indian ER&D players based on revenue size, EBITDA margin and exposure to automotive vertical



Source: Company data, I-Sec research | The size of circle represents EBITDA margin

Exhibit 41: TATATECH in the leader's quadrant of Zinnov ER&D Services overall rating-CY23



Source: Company data, I-Sec research

TATATECH vs. TATA Elxsi

In terms of revenue, TATATECH is currently 1.4x TATA Elxsi (considering FY24 revenue). In terms of EBITDA margin, TATA Elxsi is the ER&D industry leader with 29.5% FY24 EBITDA margin, whereas TATATECH stands at a decent 18.4%. TATA Elxsi provides a RoE of 34.5% vs. 21.9% by TATATECH for FY24.

However, TATATECH has an edge over TATA Elxsi when it comes to exposure to automotive. TATATECH has 87% exposure to the fast-growing vertical while TATA Elxsi has an exposure of 50%.

Tata Sons has an ownership of 38.1% in Tata Elxsi and TATA Motors has 56.7% in TATATECH. The high promoter stake in TATATECH presents scope for tailwinds for receiving work from group companies such as Tata Motors and Air India, Vistara.

Another edge that TATATECH has vs. TATA Elxsi is that it is the sole Tata Group company that is an accredited engineering services provider for Airbus. This indicates potential big strides in aerospace by TATATECH.

Turnkey cars made with end-to-end engineering done by TATATECH

Exhibit 42: ES8 - NIO

Source: Company website

Exhibit 43: Volvo - Polestar-1

Source: Company website

Exhibit 44: Tata Tigor

Source: Company website

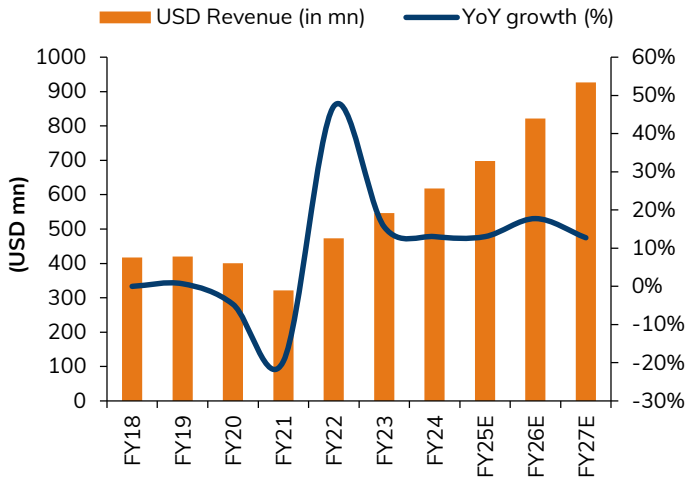
Exhibit 45: VinFast- VF5-6

Source: Company website

Financial metrics

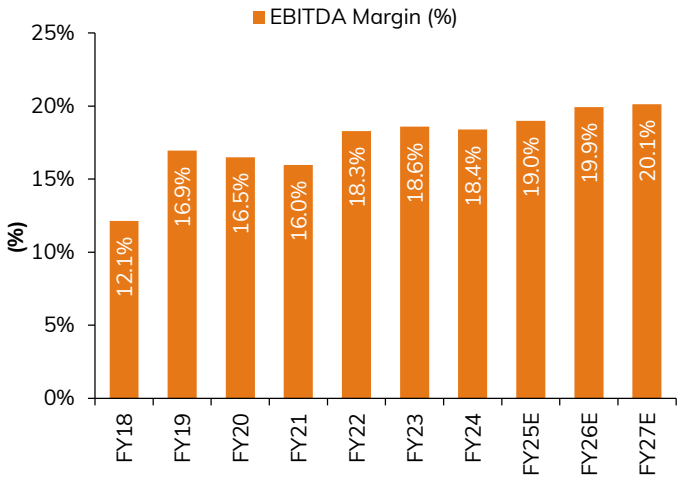
TATATECH saw growth pick-up in FY22 (up 47.1% USD) from the VinFast project. In FY23, growth reached a normalised level of 15.6% and FY24 saw stable growth of 13% despite VinFast ramping down. As VinFast is not going to be among the top-5 clients going forward, we expect growth to remain stable in FY25 at 13% and then ramp-up from FY26E. We expect FY25E–27E USD revenue CAGR at 15.2%. TATATECH has maintained its EBITDA margin at a stable level of ~18%. We factor in 200bps margin expansion from FY24–27, as management targets margin expansion based on levers of: 1) growth; 2) offshoring; and 3) pyramid rationalisation.

Exhibit 46: Revenue and growth: FY23 saw YoY growth moderation due to VinFast account ramp down; I-Sec estimates: FY25–27E USD revenue CAGR of 15.2%



Source: Company data, I-Sec research

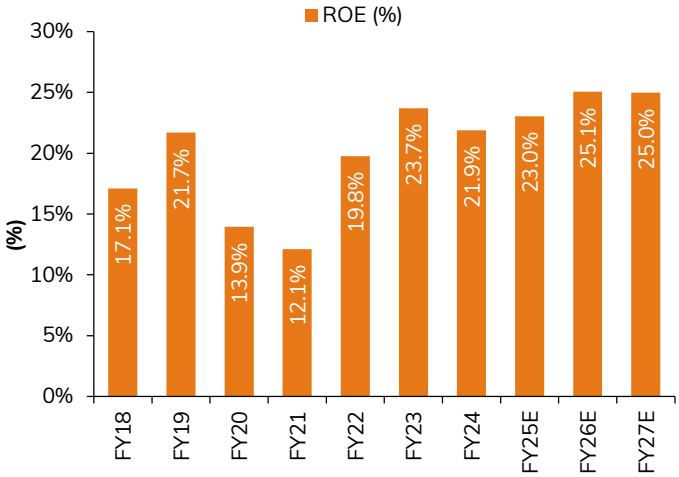
Exhibit 47: EBITDA margin profile has been consistent; I-Sec estimates: 19–20% EBITDA margin for FY25–27E



Source: Company data, I-Sec research

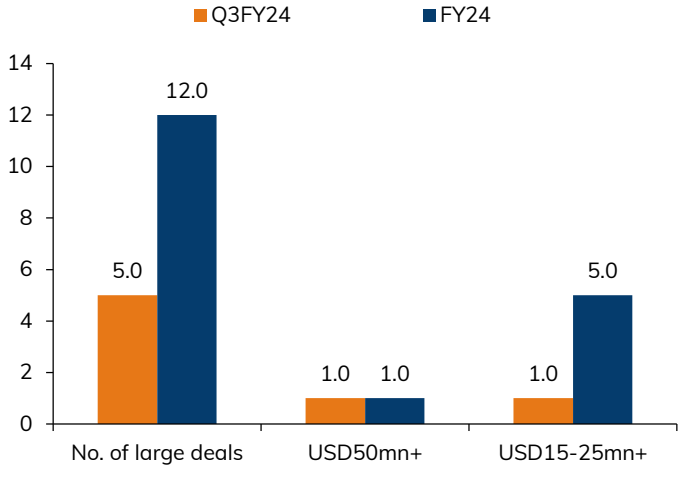
On the lines of EBITDA margin expansion, we expect 200bps expansion from FY25-27. TATATECH's RoE stood at 21.9% in FY24, vs. 26%/18%/27%/35% for KPIT/ CYL/LTTS/TELX, which we expect will likely improve in-line with margin expansion.

Exhibit 48: Estimated RoE to go up by 200bps from FY25-27



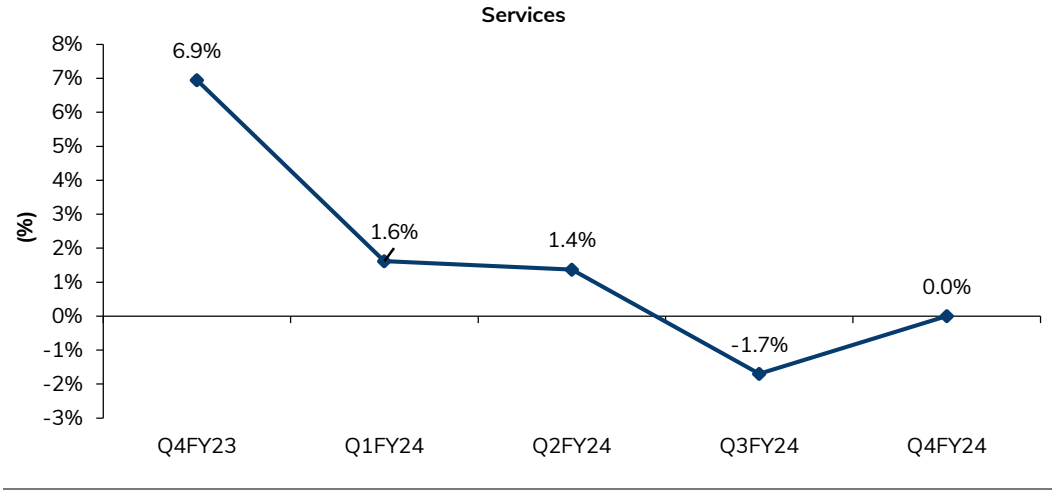
Source: Company data, I-Sec research

Exhibit 49: Large deals on track; robust addition in USD 15–25mn+ client bucket



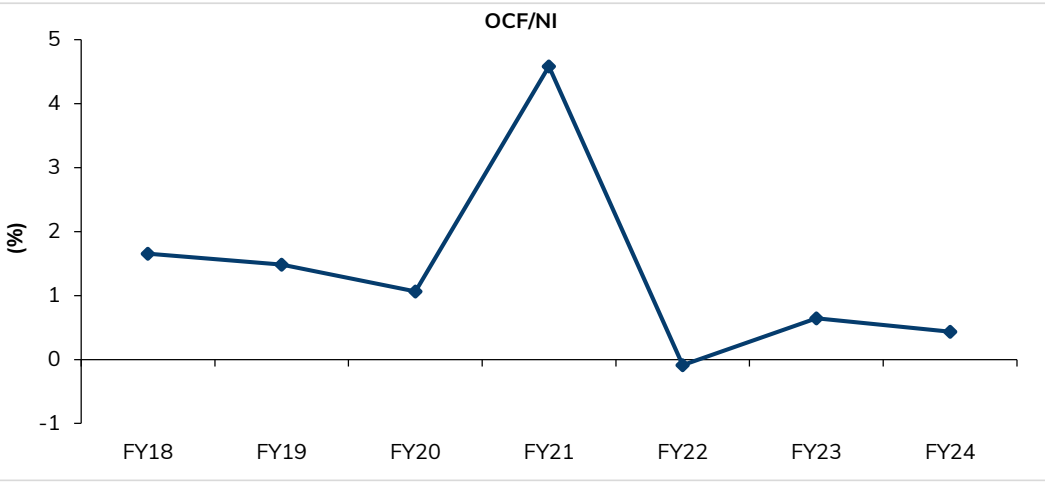
Source: Company data, I-Sec research

Exhibit 50: Services QoQ growth is seeing a slowdown due to VinFast account ramp down



Source: Company data, I-Sec research

Exhibit 51: Cash conversion impacted by working capital heavy education business



Source: Company data, I-Sec research

Valuations rich; initiate with BUY

Business moat attributes premium

ER&D players have relative business moat over IT Services companies due to entry barrier, high switching costs and client stickiness. Gestation or vintage required to forge high-value client relations create a significant entry barrier in favour of ESPs. High cost of switching vendors (vendor replacement poses risk of a two–four-year delay in innovation to production cycle of complex engineered products). Moreover, Indian ESPs with offshore delivery presence are more profitable businesses compared to their global/European peers; and even have better RoE profiles. These attributes confer a premium for Indian ESPs over IT Services players and global ESPs.

TATATECH – initiate with BUY

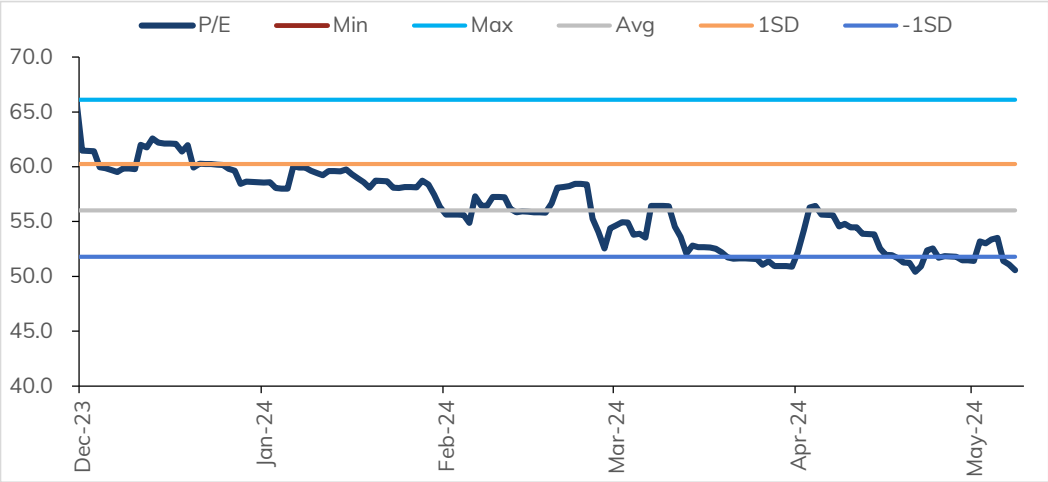
We initiate coverage with BUY rating. We arrive at TP of INR 1,330 based on 56x target PE multiple (average since listing) and FY26E EPS. We believe that the premium multiple is premised on –

- Its strong position in fast growing sub-segment of Technology Services players with possibility of upside risk to growth backed by structural growth drivers in

automotive engineering services segment. At 17.7% USD revenue growth for FY25, TATATECH will be among industry growth leaders.

- Resilience backed by Tata Group synergy.
- Business moat owing to entry barrier.

Exhibit 52: TATATECH one-year forward PE chart, since listing in Nov'23

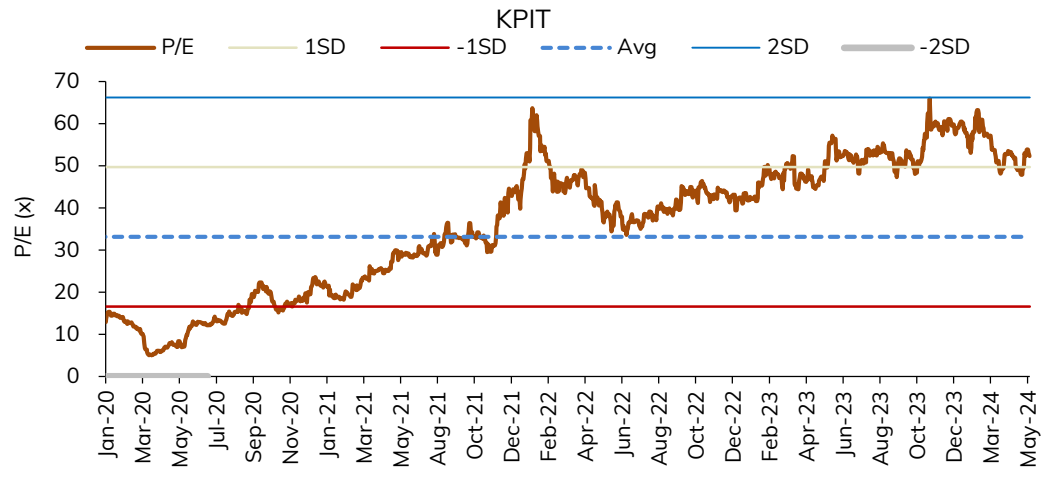


Source: I-Sec research, Bloomberg

Case study: KPIT

KPIT is the closest comparable peer for TATATECH given that both share concentrated exposure to the automotive engineering services segment. Moreover, TATATECH has limited trading history, since its debut in Nov'23 and KPIT's valuation trend serves as a reference benchmark. KPIT is undergoing consistent and continuous re-rating since pandemic. Its P/E has inched up 3.4x over FY21–24, as average P/E moved from 15.8x in FY21 to 53.4x FY24. This valuation re-rating is driven by an upliftment in KPIT's growth profile – backed by the digitisation and electrification trend in the automotive industry. In our view, this structural growth driver is intact, and thus, supports premium valuations.

Exhibit 53: KPIT one-year forward PE chart



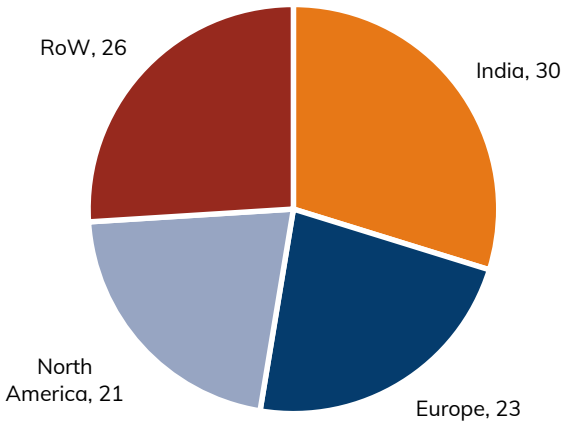
Source: I-Sec research, Bloomberg

Risks

Under penetration in Europe

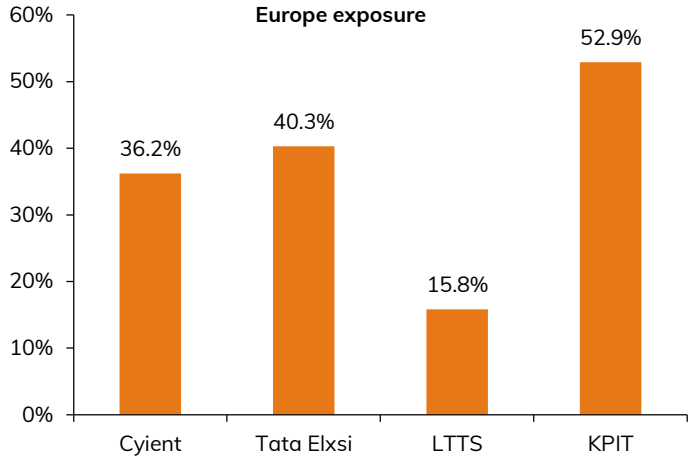
TATATECH has significant presence in RoW from VinFast and in India from Tata Motors. However, Europe continues to be the hub of automotive OEMs. Hence, ER&D companies that have a more impressionable presence in the geography tend to have an edge as OEMs prefer the ER&D vendors in their proximity. Case in point: LTTS with the least exposure to the geography, has growth overhang because of it, while the reverse is true in the case of KPIT. TATATECH is in the middle with 23%-25% exposure to the geography. In our view, the company's presence in the region has room for improvement. The recent BMW JV is a step that will likely tilt the scale in this direction and improve TATATECH's revenue mix.

Exhibit 54: Under-penetration in Europe...



Source: Company data, I-Sec research

Exhibit 55: ...vs. peers who have an edge with higher EU exposure



Source: Company data, I-Sec research

Brief company background on TATATECH

TATATECH is a pure play engineering, research and design company that was incorporated in 1994 as Core Software Systems Pvt. Ltd and got acquired by Tata Group in 1996. It has marquee clients in the automotive space, which includes Tata Motors, JLR (Jaguar Land Rover), Honda, Ford, VinFast and BMW. It is also making strides in the aerospace segment by servicing clients such as Airbus and Tata Group. Tata Motors has a 55.39% stake in the company. It has been positioned in the leader's quadrant for ER&D services in 2023.

TATATECH originated in 1989 as the automotive design division of Tata Motors. In 1994, it transitioned into an independent entity while Tata Motors retained a majority stake and remained its primary client.

In Aug'05, TATATECH acquired INCAT International, an automotive and aerospace engineering company based in the UK and the US, for GBP 53.4mn.

In 2011, TATATECH raised INR 141 crore (USD 30mn) by selling 13% stake to Tata Capital and Alpha TC Holdings.

In Apr'13, TATATECH acquired Cambric Corporation, an American engineering services company, for USD 32.5mn.

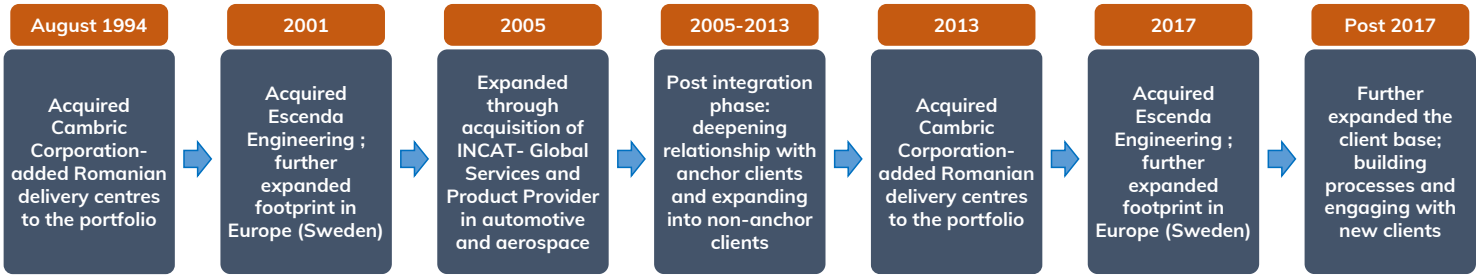
In May'17, TATATECH obtained full ownership of Escenda Engineering AB, a Swedish automotive design and product engineering company.

In 2017, as part of debt reduction for Tata Motors, the Tata Group planned to sell a 43% stake in TATATECH to Warburg Pincus for USD 360mn, relinquishing its controlling interest. However, the deal was canceled in 2018.

In Nov'23, TATATECH initiated its book-built IPO, raising funds worth INR 3,042 crore (USD 380mn), marking Tata Group's first public offering in nearly twenty years. Trading of its shares commenced on the NSE and BSE on 30 Nov'23.

It has acquired entities such as INCAT International (in 2005), Cambric Corporation (in 2013) and Escenda Holdings (2017) to increase its depth in automotive and aerospace domains in its journey of 30 years. In terms of parameters such as size, revenue growth and EBITDA margin, it stands right in the middle among pure-play Indian ER&D peers such as Cyient, KPIT Tech, LTTS and TATA Elxsi.

Exhibit 56: Timeline



Source: Company data, I-Sec research

Exhibit 57: Key management personnel

S. No.	Name	Title	Profile
1	**Warren Harris**	CEO/MD	Serves as both the Chief Executive Officer and Managing Director of the organisation. He obtained his bachelor's degree in engineering (technology) from the University of Wales Institute of Science and Technology, University of Wales. Additionally, he holds an Honorary Doctorate in Philosophy from Amity University, Uttar Pradesh. Harris has completed the Advanced Management Program at Harvard Business School. He is also a chartered mechanical engineer and holds membership with the Institution of Mechanical Engineers. He has been with TATATECH for 15 years.
2	**Sukanya Sadasivan**	COO	Serves as the Chief Operating Officer of the organisation. In her role, she oversees the management of Delivery, Practice, and internal digital & IT systems at TATATECH. She earned her Bachelor's degree in Computer Science and Informatics from Bharathiar University. Prior to joining TATATECH, Sadasivan held the position of Senior Vice President and Chief Information Officer at Tata Consultancy Services Limited (TCS). With over 33 years of experience at TCS, she held numerous leadership positions and made significant contributions to the company.
3	**Pawan Bhageria**	President – Global HR, IT, Admin and Education	Serves as the President (Global HR, IT, Admin, and Education) of the organisation. He oversees delivery leadership, sales, client leadership for services and education, as well as global human resources leadership. Bhageria earned a Bachelor's degree in Mechanical Engineering from Birla Institute of Technology, Ranchi University, and a Post-Graduate Diploma in Management from XLRI, Jamshedpur. Before joining the company, he held the position of Regional Manager – Information Technology at General Motors Technical Centre India Private Limited.
4	**Savitha Balachandran**	CFO	Holds the position of Chief Financial Officer, overseeing global finance and procurement. She earned her Bachelor's degree in Commerce from Bangalore University and a Post-Graduate Diploma in Management from Symbiosis Centre for Management and Human Resource Development. In 2012, she successfully completed the Fulbright Scholarship Program and passed the final examination for Chartered Financial Analyst from the CFA Institute. Before joining the company, she was affiliated with Tata Motors Limited.
5	**Nachiket Paranjpe**	President – Automotive Sales	Holds the role of President of Automotive Sales. He became a part of TATATECH Europe Limited, a subsidiary of the company, in 2019. Paranjpe is tasked with overseeing sales and client engagement at JLR. He earned his Bachelor's degree in Mechanical Engineering from Maharashtra Institute of Technology, University of Pune, and a Master's degree in Management from Purdue University. Before joining the company, he served as the Head of the Automotive Integrated Business Unit at KPIT Technologies GmbH in Germany.
6	**Aloke Palsikar**	EVP and Head – Aerospace and Industrial Heavy Machinery Sales	Serves as the Executive Vice President and Head of Aerospace and Industrial Heavy Machinery Sales. His responsibilities include overseeing global sales for non-automotive industry sectors. Palsikar holds a Bachelor's degree in Electrical Engineering from the University of Bombay; a Master's degree in Technology in Electrical Engineering with a focus on electrical machines and drives from the Indian Institute of Technology, Bombay, and has completed the Management Education Program at the Indian Institute of Management, Ahmedabad. Before joining the company, he held various roles at Siemens Limited as Chief

			Manager – Marketing; at Larson & Toubro Infotech Limited as Assistant General Manager; at Tech Mahindra Limited as Global Competency Head; and at Satyam Computer Services Limited as Assistant Vice President.
7	**Prahalada Rao**	President and Client Partner – Tata Motors	Joined TATATECH in Jun'21 as President & Client Partner for the Tata Motors Ltd. (TML) SBU division. With over 27 years of experience at Mahindra & Mahindra, he held various leadership roles, focusing on business strategy, product development, and digital transformation. In his last role at Mahindra & Mahindra, he led the Business Strategy, Transformation & Planning division in the Auto & Farm sector. Prahalada played a key role in developing global platforms such as XUV 500, Tivoli, Scorpio, and THAR. He holds a PGDM from SP Jain Institute of Management & Research, Mumbai, and a Bachelor's degree in Mechanical Engineering from Bangalore University.
8	**Sriram Lakshminarayanan**	President and Chief Technical Officer	Serves as both the President and Chief Technical Officer of the Company. His role involves overseeing the practice organisation, strategic monetisation of intellectual property and assets, and managing the products business. He earned his Bachelor's degree in Electronics and Communication Engineering from Madurai Kamaraj University. Before joining the company, he held positions at Complete Business Solutions (India) Limited as a Senior Application Developer and at IBM India Private Limited as an Executive.

Source: I-Sec research, Company data

Exhibit 58: TATATECH shareholding pattern: Shareholding through Tata Motors; TATATECH – a step down subsidiary of Tata Sons

Category of shareholder	No. of shareholders	No. of fully paid-up equity shares held	Total no. shares held	Shareholding as a % of total no. of shares (calculated as per SCRR, 1957) As a % of (A+B+C2)	No. of Voting Rights	Total as a % of Total Voting right	No. of Locked-in shares		No. of equity shares held in dematerialised form
							No.(a)	As a % of total Shares held(b)	
(A) Promoter & Promoter Group - Tata Motors	2	22,46,89,736	22,46,89,736	55.39	22,46,89,736	55.39	22,46,89,736	100	22,46,89,736
(B) Public	11,78,336	18,09,78,794	18,09,78,794	44.61	18,09,78,794	44.61	10,61,47,950	58.65	18,09,78,790
Grand Total	11,78,338	40,56,68,530	40,56,68,530	100	40,56,68,530	100	33,08,37,686	81.55	40,56,68,526

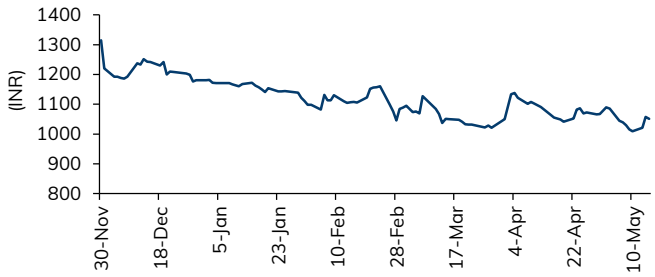
Source: Company data, I-Sec research

Exhibit 59: Shareholding pattern

%	Nov'23	Dec'23	Mar'24
Promoters	55.4	55.4	55.4
Institutional investors	9.0	4.7	2.6
MFs and others	4.5	1.9	1.1
FIs/Banks	1.3	0.2	0.1
Insurance	0.6	0.5	0.3
FIIs	2.6	2.1	1.1
Others	35.6	39.9	42.0

Source: Bloomberg

Exhibit 60: Price chart



Source: Bloomberg

Exhibit 61: Key Financial metrics

Companies	Rating	MCap (USD bn.)	EV (INR bn)	Target Price	CC Revenue growth YoY (%)			USD Revenue growth (%)			EBIT Margin (%)			EPS		
					FY24	FY25E	FY26E	FY24	FY25E	FY26E	FY24	FY25E	FY26E	FY24	FY25E	FY26E
TCS	ADD	169	13,760	4,330	3.4	7.3	10.7	4.1	7.2	10.7	24.6	25.4	25.9	125.6	142.3	160.3
Infosys	ADD	71	5,724	1,570	1.4	3.6	8.4	1.9	3.5	8.4	20.7	20.3	20.8	63.3	60.9	71.3
HCL Tech	REDUCE	43	3,362	1,330	5.0	4.2	8.2	5.4	4.2	8.2	18.2	18.0	18.9	57.9	59.7	68.3
Wipro	REDUCE	29	2,143	410	0.0	0.9	6.1	-3.2	0.9	6.1	15.1	15.6	16.8	20.7	22.2	25.7
Tech M	ADD	15	1,200	1,350	0.0	2.6	9.5	-5.0	1.9	9.5	6.1	10.0	13.3	26.6	47.1	67.6
LTIMindtree	ADD	16	1,297	5,320	0.0	5.5	14.3	4.4	5.5	14.3	15.7	16.6	17.5	154.5	175.9	215.7
Mphasis	SELL	5	424	1,950	-6.6	10.3	11.5	-6.3	10.3	11.5	15.5	14.8	15.8	82.3	88.8	108.8
Persistent	ADD	6	519	3,920	0.0	14.8	16.5	14.5	14.7	16.5	14.4	14.4	16.5	71.6	84.4	111.9
Happiestminds	HOLD	1	116	870	11.0	29.9	26.6	10.4	29.6	26.6	17.1	18.4	19.9	16.7	22.7	27.0
Tata Technologies	BUY	5	421	1,330	12.6	12.8	17.7	13.0	13.0	17.7	16.3	16.8	17.7	16.7	19.4	23.8

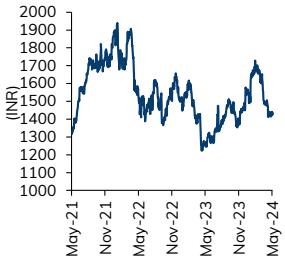
Companies	USD Revenue CAGR	EPS CAGR	P/E		PEG		EV/EBITDA		EV/Sales		ROE	
	FY23-26E	FY23-26E	FY25E	FY26E	FY25E	FY26E	FY25E	FY26E	FY25E	FY26E	FY25E	FY26E
TCS	7.3%	11.6%	27.4	24.3	2.4	2.1	19.1	16.9	5.3	4.7	53.4	54.3
Infosys	4.6%	7.4%	23.4	20.0	3.2	2.7	15.3	13.7	3.6	3.3	27.6	29.7
HCL Tech	6.0%	7.6%	22.1	19.3	2.9	2.5	13.3	11.7	2.9	2.7	23.3	25.6
Wipro	1.2%	7.5%	20.6	17.7	2.7	2.4	12.1	10.7	2.3	2.2	14.6	15.5
Tech M	2.0%	6.2%	27.1	18.9	4.3	3.0	16.8	12.3	2.2	2.0	15.6	21.7
LTIMindtree	8.0%	13.2%	26.4	21.5	2.0	1.6	18.0	14.9	3.4	3.0	24.0	24.8
Mphasis	4.8%	8.0%	25.9	21.2	3.3	2.7	16.1	13.7	2.9	2.5	18.7	21.6
Persistent	15.2%	-3.3%	40.6	30.6	-12.3	-9.3	26.2	20.0	4.6	3.9	25.2	30.8
Happiestminds	21.9%	19.2%	35.8	30.1	1.9	1.6	24.9	18.2	5.4	4.3	21.6	22.5
Tata Technologies	14.5%	17.1%	54.5	44.4	3.2	2.6	38.1	30.6	7.2	6.1	23.0	25.1
Sector Average	**9%**	**10%**	**28.4**	**22.9**	**1.0**	**0.9**	**17.6**	**14.3**	**3.4**	**2.9**	**22.1**	**24.7**

Source: I-Sec research, Company data

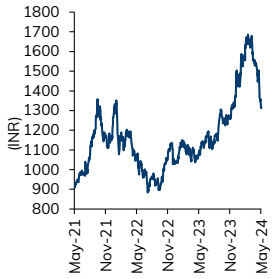
Price charts

TCS

Infosys



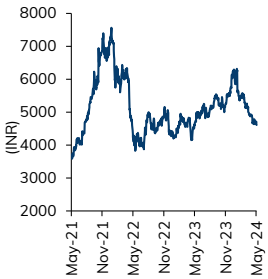
HCL Tech



Wipro

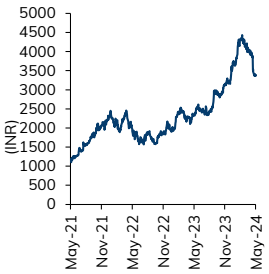
Tech M

LTIMindtree



Mphasis

Persistent



Happiestminds

Source: Bloomberg

Financial Summary

Exhibit 62: Profit & Loss

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
Net Sales (USD mn)	**618**	**698**	**822**	**926**
Net Sales (INR. mn)	**51,172**	**58,305**	**69,050**	**77,824**
Operating Expense	41,759	47,237	55,290	62,159
EBITDA	**9,413**	**11,068**	**13,760**	**15,665**
EBITDA Margin (%)	18.4	19.0	19.9	20.1
Depreciation & Amortization	1,059	1,283	1,519	1,712
EBIT	8,354	9,785	12,241	13,953
Interest expenditure	189	200	200	200
Other Non-operating Income	1,156	1,200	1,200	1,200
Recurring PBT	**9,321**	**10,785**	**13,241**	**14,953**
Profit / (Loss) from Associates	**-**	**-**	**-**	**-**
Less: Taxes	2,527	2,912	3,575	4,037
PAT	6,794	7,873	9,666	10,916
Less: Minority Interest	-	-	-	-
Net Income (Reported)	**6,794**	**7,873**	**9,666**	**10,916**
Extraordinaries (Net)	-	-	-	-
Recurring Net Income	**6,794**	**7,873**	**9,666**	**10,916**

Source Company data, I-Sec research

Exhibit 63: Balance sheet

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
Total Current Assets	38,227	45,062	54,093	62,945
of which cash & cash eqv.	5,199	6,900	9,609	13,728
Total Current Liabilities & Provisions	21,001	24,092	28,450	32,016
Net Current Assets	**17,225**	**20,970**	**25,643**	**30,930**
Investments	1,504	1,579	1,658	1,740
Net Fixed Assets	1,293	1,411	1,491	1,579
ROU Assets	1,810	1,810	1,810	1,810
Capital Work-in-Progress	-	-	-	-
Goodwill	7,826	7,826	7,826	7,826
Other assets	4,548	4,548	4,548	4,548
Deferred Tax Assets	-	-	-	-
Total Assets	**34,782**	**38,719**	**43,552**	**49,009**
Liabilities				
Borrowings	**-**	**-**	**-**	**-**
Deferred Tax Liability	**-**	**-**	**-**	**-**
provisions	-	-	-	-
other Liabilities	2,574	2,574	2,574	2,574
Minority Interest	-	-	-	-
Equity Share Capital	811	811	811	811
Reserves & Surplus*	31,397	35,334	40,167	45,624
Total Net Worth	**32,208**	**36,145**	**40,978**	**46,435**
Total Liabilities	**34,782**	**38,719**	**43,552**	**49,009**

Source Company data, I-Sec research

Exhibit 64: Quarterly trend

(INR mn, year ending March)

	Jun-23	Sep-23	Dec-23	Mar-24
Net Sales	12573	12693	12895	13011
% growth (QoQ)	-10.3%	1.0%	1.6%	0.9%
EBITDA	2502	2144	2366	2400
Margin %	19.9%	16.9%	18.3%	18.5%
Other Income	308.7	298.5	306.9	241.4
Adjusted Net Profit	1913	1605	1703	1573

Source Company data, I-Sec research

Exhibit 65: Cashflow statement

(INR mn, year ending March)

	FY24A	FY25E	FY26E	FY27E
CFO before WC changes	10,379	12,068	14,760	16,665
CFO after WC changes	**2,943**	**7,113**	**9,221**	**11,459**
Capital Commitments	(1,220)	(1,400)	(1,600)	(1,800)
Free Cashflow	**1,724**	**5,713**	**7,621**	**9,659**
Other investing cashflow	(1,206)	(75)	(79)	(83)
Cashflow from Investing Activities	**3,936**	**(1,475)**	**(1,679)**	**(1,883)**
Issue of Share Capital	0	-	-	-
Interest Cost	-	-	-	-
Inc (Dec) in Borrowings	-	-	-	-
Cash flow from Financing Activities	**(5,568)**	**(3,937)**	**(4,833)**	**(5,458)**
Dividend paid	(4,990)	(3,937)	(4,833)	(5,458)
Others	-	-	-	-
Chg. in Cash & Bank balance	**1,312**	**1,701**	**2,710**	**4,119**
Closing cash & balance	5,199	6,900	9,609	13,728

Source Company data, I-Sec research

Exhibit 66: Key ratios

(Year ending March)

	FY24A	FY25E	FY26E	FY27E
Per Share Data (INR)				
Reported EPS	16.7	19.4	23.8	26.9
Diluted EPS	16.7	19.4	23.8	26.9
Cash EPS	19.4	22.6	27.6	31.1
Dividend per share (DPS)	10.1	9.7	11.9	13.5
Book Value per share (BV)	79.4	89.1	101.0	114.5
Dividend Payout (%)	60.0	50.0	50.0	50.0
Growth (%)				
Net Sales	15.9	13.9	18.4	12.7
EBITDA	14.7	17.6	24.3	13.8
EPS	8.9	15.9	22.8	12.9
Valuation Ratios (x)				
P/E	63.2	54.5	44.4	39.3
P/CEPS	54.7	46.9	38.4	34.0
P/BV	13.3	11.9	10.5	9.2
EV / EBITDA	45.0	38.2	30.5	26.5
P/S	8.4	7.4	6.2	5.5
Dividend Yield (%)	0.9	0.9	1.1	1.3
Operating Ratios				
EBITDA Margins (%)	18.4	19.0	19.9	20.1
EBIT Margins (%)	16.3	16.8	17.7	17.9
Effective Tax Rate (%)	27.1	27.0	27.0	27.0
Net Profit Margins (%)	13.3	13.5	14.0	14.0
Inventory Turnover Days	-	-	-	-
Fixed Asset Turnover (x)	40.6	43.1	47.6	50.7
Receivables Days	80	77	76	78
Payables Days	41	33	32	33
Working Capital Days	94	82	80	78
Net Debt / EBITDA (x)	(4.9)	(5.4)	(6.3)	(8.0)
Profitability Ratios				
RoCE (%)	19.6	20.9	23.2	23.3
RoIC (%)	28.0	29.9	34.5	37.5
RoNW (%)	21.9	23.0	25.1	25.0

Source Company data, I-Sec research

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