### India

IPO Details	
Issue Opens	22-Nov-23
Issue Closes	24-Nov-23
Total Issue Size (m shares)	Upto 60.8
OFS (m shares)	Upto 60.8
Employee reservation (m shares)	2.0
TAMO shareholder reservation (m shares)	6.1
Price Band	Rs 475-500
Face value	Rs 2
Implied market capitalisation	Rs 193-203 bn

# **Tata Technologies Limited**

## IPO – Subscribe

- Upper end of the price band (Rs500/share) implies EV/revenue of ~3.8x, EV/EBITDA of 20.7x, and P/E of ~29x based on annualized 1HFY24 financials.
- The automotive vertical opportunity remains a key growth driver.
- Cash conversion could be more stable.

### Company background

Tata Technologies (TTL) is a global product engineering and digital services company whose offerings include a) outsourced engineering services & digital transformation services (services, 78.6% of revenue), and b) reselling third party software applications, value-added services and education solutions (technology solutions, 21.4%). TTL caters to the automotive (~88% of services revenue), aerospace & industrial heavy machinery verticals with 19 global delivery centres, 12,451 employees (as of 1HFY24-end) and an onshore-offshore delivery mix of 49%:51%.

### IPO details - OFS issue; m-cap at upper end is ~Rs203bn

The initial public offer or IPO price band of Rs475-500 per equity share having a face value of Rs2 implies a m-cap in the range of ~Rs193-203bn. At the upper band, the total issue size (60.85m shares) is estimated at Rs30.4bn comprising the offer for sale by Tata Motors (46.27m, Rs23.14bn), Alpha TC Holdings Pte Ltd (9.7m, Rs4.85bn) and Tata Capital Growth Fund I (4.9m, Rs2.42bn). Tata Motors' shareholder reservation portion is ~6.085m shares (~10% of total issue size) and the employee reservation portion is ~2.028m shares (~3.3%). Adjusted for the reservation portions, the net offer is 52.74m shares with up to 50% QIB (qualified institutional bidder) book.

#### Automotive vertical opportunity remains a key growth driver

Management commentary suggests the automotive outsourced ER&D market (~20% of overall outsourced ER&D spending and ~US\$18-20bn in 2022) is likely to grow at ~11% CAGR over 2022-26F and is a key tailwind in the medium term. Segregating further, ADAS & Autonomous (US\$1.5-2bn), Hybrid Electric Mobility (US\$3-4bn), Infotainment & Connected (US\$3-4bn), Safety Systems (US\$1-2bn), and Traditional Powertrain (US\$0.5-1.5bn) and Body Engineering (US\$7-8bn) represent a significant market opportunity. Tailwinds from ACES (autonomous, connected, electrification and shared mobility), long-standing client relationships, client diversification strategy (anchor client Tata Motors & JLR now contribute ~46% to 1HFY24 services revenue vs. ~54% in FY20), and deep domain expertise with multiple differentiated ER&D capabilities could continue to aid TTL's automotive vertical (~88% of services) growth.

### Rationale to subscribe for the IPO

TTL's IPO price band implies 1) EV/revenue of ~2.8x, 2) EV/EBITDA of ~15x, and 3) a P/E of ~21.4x based on FY26F financials. TTL's peers (LTTS, TELX, KPIT and Cyient Ltd) trade at an average P/E of ~33x FY26F consensus EPS and ~23x average of LTTS & Cyient Ltd's. We expect US\$ revenue/EBITDA (Rsm)/PAT (Rsm) CAGR of 13.6%/16.1%/15%, respectively, over FY23-26F. We recommend subscribing to the IPO given the long term opportunities in the Er&d segments of automotive, aerospace, size and scale to participate in the same and scope to improve margins & cash flow going ahead. Downside: Client specific challenges in a high client concentration portfolio, significant growth in technology solutions which could limit potential margin expansion.

Financial Summary	Mar-22A	Mar-23A	Mar-24F	Mar-25F	Mar-26F
Revenue (Rsm)	35,296	44,142	51,829	59,718	68,952
EBITDA (Rsm)	6,456	8,210	9,579	11,131	12,860
EBITDA margin	18.3%	18.6%	18.5%	18.6%	18.7%
Net Profit (Rsm)	4,370	6,241	6,972	8,126	9,488
Core EPS (Rs)	10.8	15.4	17.2	20.0	23.4
Core EPS growth	82.7%	42.7%	11.8%	16.6%	16.8%
P/E (x)	46.4	32.5	29.1	25.0	21.4
ROE (%)	19.2%	20.9%	20.5%	21.0%	21.5%

Research Analyst(s)



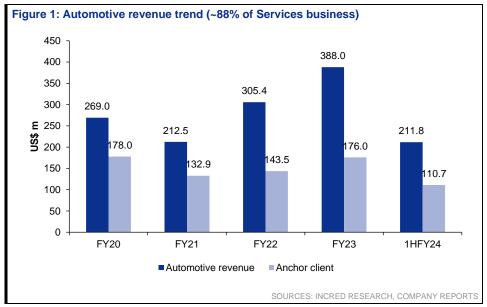
Abhishek SHINDADKAR T (91) 22 4161 1543 E abhishek.shindadkr@incredcapital.com Tushar WAVHAL T (91) 22 4161 1544 E tushar.wavhal@incredcapital.com

SOURCES: INCRED RESEARCH, COMPANY REPORTS

## **Investment Arguments**

## Well positioned in the automotive segment

Automotive ER&D services span the entire automotive value-chain and include concept design and styling, tear down and benchmarking ("TDBM"), vehicle architecture, body engineering, chassis engineering, virtual validation, e-Powertrain, electrical and electronics, connected, manufacturing engineering, test and validation and vehicle launch. Long standing relationship with anchor clients (JLR since 2010 and TML) have helped TTL incubate and build skills and value proposition for the automotive sector like full vehicle proposition and light weight structures. Large market opportunity coupled with deep domain expertise and differentiated capabilities could continue to aid TTL's automotive vertical growth.



# FY22 saw focus shift to a vertical structure and non-captive accounts

TTL moved to a vertical structure vs. regional earlier to capitalize on the opportunity in ACES (autonomous, connected, electrification and shared) across manufacturing clients. The Proprietary Electric Vehicle Modular Platform (eVMP) enabled TTL to secure multimillion-dollar orders in the electric vehicle battery space while investments in digital and embedded systems led to large deal wins in Europe, North America & Asia Pacific. Outside the automotive vertical, empanelment by Airbus in FY22 into its engineering, manufacturing engineering, and services strategic supplier (EMES3) program with collaboration across multiple domains & geographies could aid aerospace BU and drive TTL's diversification strategy. The strategic move to capture new growth opportunities outside anchor relationships (Tata Motors & JLR) led to reduced dependence, with non-anchor accounts contributing ~60% in FY23 vs. ~46% in FY20.

## Leveraging automotive learnings in aerospace

Aerospace business could witness growth over the next two years given the accreditation with a large aircraft manufacturer in FY22. TTL would work around engineering, manufacturing engineering, and services strategic supplier (EMES3) program with collaboration across multiple domains & geographies. TTL highlighted that it has been building order book post accreditation and that ramp-up could start from 2HFY24F with material growth in FY25F and FY26F.

## TCHM could be alternate growth vector too

TTL highlighted that generally TCHM (Transportation & Construction Heavy Machinery) industry lags the automotive industry by three-four years in adopting

newer technology trends and expects that electrification adoption could be on the rise. Further, it also believes that it is well positioned to capture potential opportunities given their learnings from the automotive segment.

## Technology solutions could complement Services business

TTL leverages its automotive domain experience and in-house training expertise to address lack of skills challenges in automotive sector. Company has collaborated with government backed ITI institutes and private firms to provide training solutions. Initially TTL signed MoU with Karnataka government for training solutions and subsequently with nine states and is likely to sign more in the medium term. Note the business is project based and lumpy in nature but is profitable. Technology solutions business which includes re-selling of 3rd party software & value-added services (~9% of revenue in 1HFY24) and Education (~12% of revenue in 1HFY24) margins could be lower than core services business.

## Cash conversion could be more stable

TTL's EBITDA margin rose ~600bp to 18.4% in 1HFY24 vs. 12.5% in FY18 driven by growth leverage and moderation in consultancy & miscellaneous expenses. Although cash conversion appears healthy with an average OCF/EBITDA of ~77% over FY18-1HFY24, it remains uneven and skewed (+289% in FY21 and -6% in FY22) driven by the swing in receivables. 1HFY24 operating cash flow was negative as well, impacted by the increased working capital requirement. TTL has net cash of ~Rs9bn (~Rs23 per share) as of 1HFY24-end.

## Differentiated training could help employee retention

TTL acknowledge that supply constraints could continue to be a challenge given healthy demand (European investments in India vs. Eastern Europe and Japan earlier) and little or no differentiation across top talent in India vs. developed economies. However, it hopes that differentiated training (rotating graduates across parent's production facilities), investment in e-learning platform could help contain attrition and knowledge retention while improved profile post IPO could help attract top delivery and hunting talent. IT Services | India Tata Consultancy Services | November 20, 2023

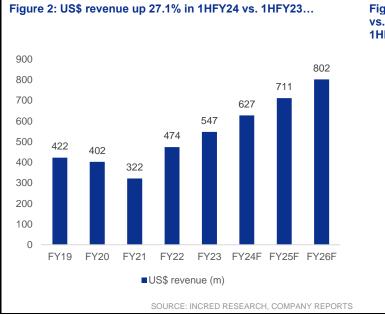
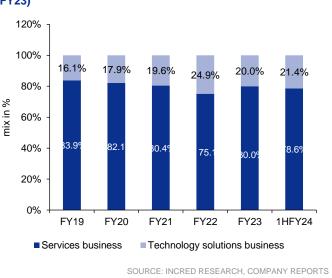
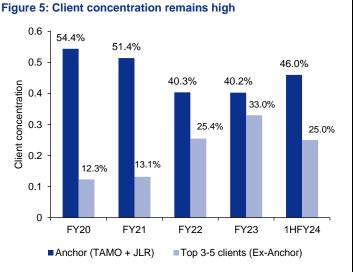


Figure 4: Diversified portfolio across geographies 120% 100% 5.6% 8.2% Geographical exposure 8.0% 6.5% 80% 99 60% 22.7% 26.3% 20.2% 24.5% 40% 19.7% 20% 5 1 2.4 80.19 29.09 9.89 0% FY20 FY22 1HFY24 **FY21** FY23 ■India ■UK ■North America ■Rest of Europe ■RoW SOURCES: COMPANY REPORTS, INCRED RESEARCH

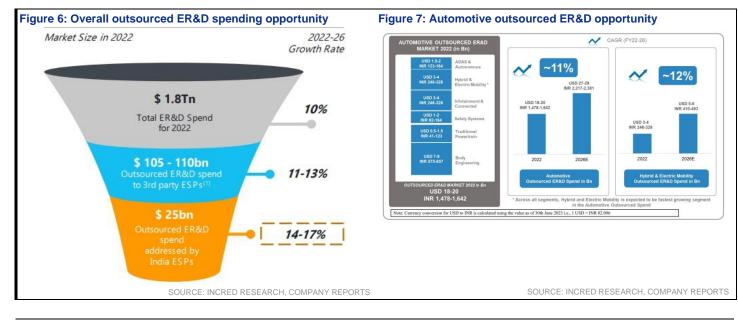
## Key charts

Figure 3: ...led by technology solutions (up ~108% in 1HFY24 vs. 1HFY23) and services business (up 15% in 1HFY24 vs. 1HFY23)

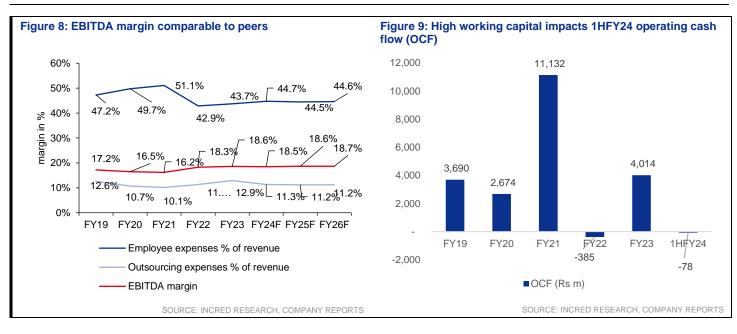




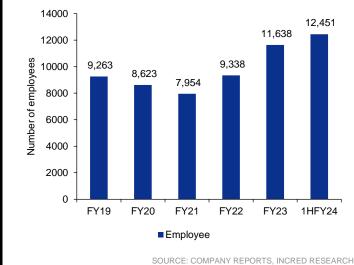
SOURCES: COMPANY REPORTS, INCRED RESEARCH, ANCHOR CLIENTS ARE PART OF TOP 5 CLIENTS

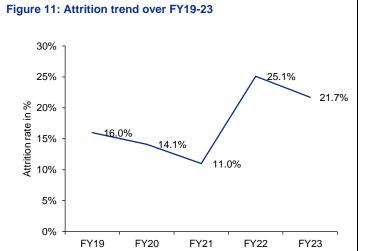


IT Services | India Tata Consultancy Services | November 20, 2023









Attrition rate

SOURCE: COMPANY REPORTS, INCRED RESEARCH

URCE: COMPANY	REPORTS,	INCRED	RESEARCH
---------------	----------	--------	----------

Name	Designation
Ajoyendra Mukherjee	Chairman, Independent Director
Warren Harris	MD & CEO
Usha Sangwan	Independent Director
Nagaraj Ijari	Independent Director
Aarthi Sivanandh	Independent Director
P.B. Balaji	Non-Executive Director
Shailesh Chandra	Non-Executive Director
	SOURCE: INCRED RESEARCH, COMPANY REPORTS

Name	Designation
Warren Harris	MD & CEO
Pawan Bhageria	President Global HR, IT, Admin & Education
Savitha Balachandran	CFO
Nachiket Paranjpe	President - Automotive Sales
Aloke Palsikar	EVP & Head of Aerospace and Industrial Heavy Machinery sales
Sriram Lakshminarayanan	President & Chief Technology Officer
Anjali Balagopal	Executive VP and General Counsel
Shailesh Saraph	EVP and Global Head - Engineering and R&D
Geena Binoy	EVP and Global Head - Digital Enterprise Solutions
	SOURCE: INCRED RESEARCH, COMPANY REPORTS

#### IT Services | India Tata Consultancy Services | November 20, 2023

Figure 14: Shareholding pattern as on date of the Draft Red Herring Prospectus					
Categories No of shares % of sharehold					
Promoter & promoter group	270,964,736	66.8%			
Public	134,703,794	33.2%			
	SOURCE: INCRED RESEARC	H, COMPANY REPORTS			

Figure 15: Post-IPO likely shareholdin	ig pattern	
Categories	No of shares	% of shareholding
Promoter & promoter group	224,689,736	55.4%
Public	180,978,794	44.6%
	SOURCE: INCRED RESEAR	CH, COMPANY REPORTS

More than 1% holders	No of shares	% of shareholding
Tata Motors	262,844,816	64.8%
TPG Rise Climate SF Pte Ltd	36,509,794	9.0%
Alpha TC Holdings Pte. Ltd	29,445,010	7.3%
Tata Capital Growth Fund I	14,722,500	3.6%
Tata Motors Finance	8,119,920	2.0%
Zedra Corporate Services (Guernsey)	5,766,720	1.4%
Patrick Raymon McGoldrick	5,000,000	1.2%
	SOURCE: COMPANY REPO	ORTS, INCRED RESEARCH

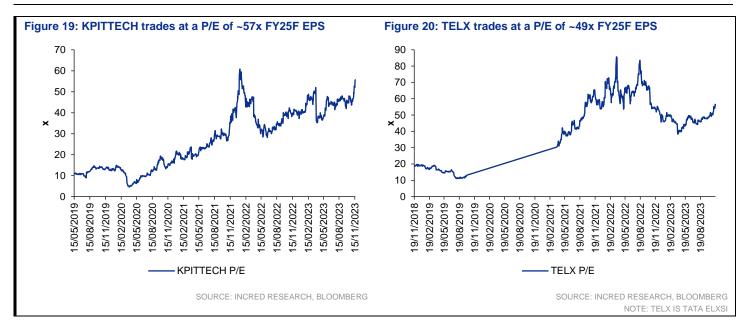
More than 1% holders	No of shares	% of shareholding
Tata Motors	216,569,816	53.4%
TPG Rise Climate SF Pte Ltd	36,509,794	9.0%
Alpha TC Holdings Pte. Ltd	19,728,157	4.9%
Tata Capital Growth Fund I	9,864,075	2.4%
Tata Motors Finance	8,119,920	2.0%
Zedra Corporate Services (Guernsey)	5,766,720	1.4%
Patrick Raymon McGoldrick	5,000,000	1.2%
	SOURCE: COMPANY REPO	ORTS. INCRED RESEARC

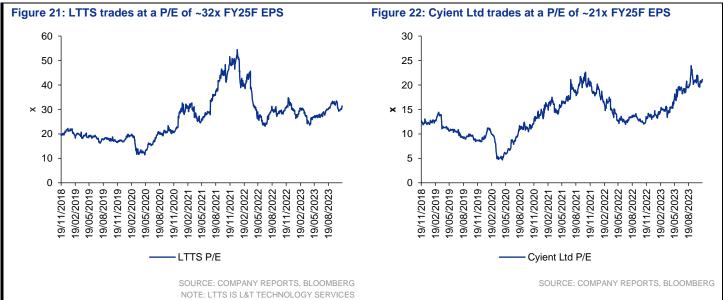
### IT Services | India Tata Consultancy Services | November 20, 2023

# **InCred** Equities

Revenue - US\$ m	FY19	FY20	FY21	FY22	FY23
L&T Technology Services	723	786	737	880	990
Tata Technologies	422	402	322	474	547
Tata Elxsi	229	227	246	332	391
KPIT Technologies	-	304	275	328	418
Cyient Ltd	660	625	557	608	746
Revenue - Rs m					
L&T Technology Services	50,783	56,191	54,497	65,697	80,136
Tata Technologies	29,422	28,521	23,809	35,296	44,142
Tata Elxsi	15,969	16,099	18,262	24,708	31,450
KPIT Technologies	- -	21,562	20,357	24,324	33,650
Cyient Ltd	46,175	44,274	41,324	45,344	60,159
EBITDA margin					
L&T Technology Services	18.0%	20.1%	18.5%	21.5%	21.3%
Tata Technologies	17.2%	16.5%	16.2%	18.3%	18.6%
Tata Elxsi	26.0%	21.3%	28.7%	31.0%	30.6%
KPIT Technologies	-	13.4%	15.1%	18.0%	18.5%
Cyient Ltd	13.7%	12.4%	13.9%	18.0%	16.7%
EBITDA - Rs m					
L&T Technology Services	9,157	11,288	10,074	14,149	17,069
Tata Technologies	5,049	4,704	3,857	6,456	8,210
Tata Elxsi	4,152	3,429	5,241	7,659	9,624
KPIT Technologies	-	2,889	3,074	4,378	6,225
Cvient Ltd	6,328	5,489	5,750	8,178	10,031
PAT - Rs m		-,	-,	-,	,
L&T Technology Services	7,656	8,186	6,633	9,570	11,699
Tata Technologies	3,527	2,516	2,392	4,370	6,241
Tata Elxsi	2,900	2,560	3,681	5,499	7,552
KPIT Technologies	_,	1,466	1,461	2,742	3,810
Cyient Ltd	4,785	3,425	3,638	5,223	5,144
Employee count	.,	-,	-,	-,	
L&T Technology Services	15,140	16,883	16,452	20,861	22,233
Tata Technologies	9,263	8,623	7,954	9,338	11,638
Tata Elxsi	6,060	6,577	7,362	9,376	11,864
KPIT Technologies	-	7,125	6,366	8,245	11,013
Cyient Ltd	15,084	13,859	12,032	13,428	15,864
Revenue per employee (US\$)		,	,••=		,
L&T Technology Services	47,762	46,573	44,773	42,194	44,528
Tata Technologies	45,558	46,596	40,420	50,707	46,990
Tata Elxsi	37,723	34,474	33,474	35,378	32,957
KPIT Technologies	-	42,639	43,167	39,830	37,955
Cyient Ltd	43,755	45,104	46,285	45,293	47,050
EBITDA per employee (Rs)	10,100	.0,101	10,200	10,200	,000
L&T Technology Services	604,835	668,602	612,327	678,251	767,731
Tata Technologies	545,093	545,564	484,926	691,411	705,448
Tata Elxsi	685,139	521,376	711,925	816,924	811,168
KPIT Technologies	-	405,511	482,873	531,024	565,264
Cyient Ltd	419,517	396,060	477,892	609,026	632,312
OCF (Rs m)	413,517	000,000	411,052	003,020	002,012
L&T Technology Services	8,062	6,381	13,325	10,062	13,051
Tata Technologies	3,690	2,674	11,132	-385	4,014
Tata Elxsi	2,149	2,558	4,374	4,830	4,869
KPIT Technologies	2,145	3,887	6,276	4,750	4,624
Cyient Ltd	3,701	5,824	8,558	6,345	5,539
OCF / EBITDA	0,101	3,021	3,000	0,010	0,000
L&T Technology Services	88.0%	56.5%	132.3%	71.1%	76.5%
Tata Technologies	73.1%	56.8%	288.6%	-6.0%	48.9%
Tata Technologies	51.8%	74.6%	83.5%	63.1%	
KPIT Technologies	51.6%	134.5%	204.2%	108.5%	74.3%
Cyient Ltd	58.5%	106.1%	148.8%	77.6%	55.2%
Oyion Llu	50.570	100.1/0		VCRED RESEARCH, CON	

IT Services | India Tata Consultancy Services | November 20, 2023





## BY THE NUMBERS

(Rs mn)	Mar-22A	Mar-23A	Mar-24F	Mar-25F	Mar-26F
Total Net Revenues	35,296	44,142	51,829	59,718	68,952
Gross Profit	13,283	18,023	19,808	22,845	26,331
Operating EBITDA	6,456	8,210	9,579	11,131	12,860
Depreciation And Amortisation	(857)	(946)	(985)	(1,075)	(1,241)
Operating EBIT	5,599	7,265	8,594	10,056	11,619
Financial Income/(Expense)	(219)	(180)	(190)	(190)	(190)
Pretax Income/(Loss) from Assoc.					
Non-Operating Income/(Expense)	488	877	829	896	1,138
Profit Before Tax (pre-El)	5,868	7,962	9,234	10,763	12,567
Exceptional Items					
Pre-tax Profit	5,868	7,962	9,234	10,763	12,567
Taxation	(1,499)	(1,721)	(2,262)	(2,637)	(3,079)
Exceptional Income - post-tax					
Profit After Tax	4,370	6,241	6,972	8,126	9,488
Minority Interests					
Preferred Dividends					
FX Gain/(Loss) - post tax					
Other Adjustments - post-tax					
Net Profit	4,370	6,241	6,972	8,126	9,488
Recurring Net Profit	4,370	6,241	6,972	8,126	9,488
Fully Diluted Recurring Net Profit	4,370	6,241	6,972	8,126	9,488

IT Services | India

Tata Consultancy Services | November 20, 2023

Cash Flow					
(Rs mn)	Mar-22A	Mar-23A	Mar-24F	Mar-25F	Mar-26F
EBITDA	6,456	8,210	9,579	11,131	12,860
Cash Flow from Invt. & Assoc.					
Change In Working Capital	(5,800)	(2,191)	(4,171)	(1,915)	(1,290)
(Incr)/Decr in Total Provisions					
Other Non-Cash (Income)/Expense	237	425			
Other Operating Cashflow					
Net Interest (Paid)/Received					
Tax Paid	(1,278)	(2,429)	(2,262)	(2,637)	(3,079)
Cashflow From Operations	(385)	4,014	3,145	6,580	8,491
Capex	(633.80)	(656.60)	(900.00)	(900.00)	(900.00)
Disposals Of FAs/subsidiaries					
Acq. Of Subsidiaries/investments					
Other Investing Cashflow	1,376	(4,218)	829	896	1,138
Cash Flow From Investing	(760)	(1,473)	(200)	(500)	(200)
Debt Raised/(repaid)					
Proceeds From Issue Of Shares					
Shares Repurchased	-	(2,959)	-	-	-
Dividends Paid	(3)	-	(2,841)	(3,450)	(4,059)
Preferred Dividends			· · ·		· · ·
Other Financing Cashflow	(444)	(510)	(190)	(190)	(190)
Cash Flow From Financing	(447)	(3,469)	(3,031)	(3,640)	(4,248)
Total Cash Generated	(89)	(4,329)	44	2,936	4,480
Free Cashflow To Equity	(1,018)	3,357	2,245	5,680	7,591
Free Cashflow To Firm	357	(860)	3,075	6,576	8,729

SOURCES: INCRED RESEARCH, COMPANY REPORTS

## BY THE NUMBERS...cont'd

IT Services | India

Tata Consultancy Services | November 20, 2023

(Rs mn)	Mar-22A	Mar-23A	Mar-24F	Mar-25F	Mar-26F
Total Cash And Equivalents	13,971	10,290	10,334	15,070	19,550
Total Debtors	7,682	11,062	13,838	15,945	18,066
Inventories					
Total Other Current Assets	8,149	16,623	16,623	16,623	16,623
Total Current Assets	29,802	37,975	40,795	47,637	54,238
Fixed Assets	3,027	3,031	2,946	2,771	2,430
Total Investments					
Intangible Assets	7,655	7,950	7,950	7,950	7,950
Total Other Non-Current Assets	1,696	3,060	3,060	3,060	3,060
Total Non-current Assets	12,378	14,040	13,955	11,981	11,639
Short-term Debt	383	406	406	406	406
Current Portion of Long-Term Debt					
Total Creditors	3,366	6,578	5,183	5,375	6,206
Other Current Liabilities	13,208	12,750	12,750	12,750	12,750
Total Current Liabilities	16,957	19,734	18,339	18,531	19,362
Total Long-term Debt					
Hybrid Debt - Debt Component					
Total Other Non-Current Liabilities	2,422	2,386	2,386	2,386	2,386
Total Non-current Liabilities	2,422	2,386	2,386	2,386	2,386
Total Provisions					
Total Liabilities	19,379	22,120	20,725	20,917	21,748
Shareholders Equity	22,802	29,895	34,025	38,701	44,130
Minority Interests					
Total Equity	22,802	29,895	34,025	38,701	44,130
Key Ratios	Mar-22A	Mar-23A	Mar-24F	Mar-25F	Mar-26F
Revenue Growth	48.2%	25.1%	17.4%	15.2%	15.5%
Operating EBITDA Growth	67.4%	27.2%	16.7%	16.2%	15.5%
Operating EBITDA Margin	18.3%	18.6%	18.5%	18.6%	18.7%
Net Cash Per Share (Rs)	34	25	25	33	44
BVPS (Rs)	56	74	84	95	109
Gross Interest Cover	25.6	40.4	45.3	53.1	61.3
Effective Tax Rate	25.5%	21.6%	24.5%	24.5%	24.5%
Net Dividend Payout Ratio	0.1%	0.0%	40.8%	42.5%	42.8%
Accounts Receivables Days	70.5	77.5	87.7	91.0	90.0
Inventory Days	NA	NA	NA	NA	NA
	0.74	0.69	0.91	0.84	0.73
Accounts Payables Days	0.74	0.00			
Accounts Payables Days ROIC (%)	36.5%	48.9%	29.0%	28.7%	
					31.1% 20.0%

SOURCES: INCRED RESEARCH, COMPANY REPORTS

#### DISCLAIMER

This report (including the views and opinions expressed therein, and the information comprised therein) has been prepared by Incred Research Services Private Ltd.(formerly known as Earnest Innovation Partners Private Limited) (hereinafter referred to as "IRSPL"). IRSPL is registered with SEBI as a Research Analyst vide Registration No. INH000011024. Pursuant to a trademark agreement, IRSPL has adopted "Incred Equities" as its trademark for use in this report.

The term "IRSPL" shall, unless the context otherwise requires, mean IRSPL and its affiliates, subsidiaries and related companies. This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject IRSPL and its affiliates/group companies to registration or licensing requirements within such jurisdictions.

This report is being supplied to you strictly on the basis that it will remain confidential. No part of this report may be (i) copied, photocopied, duplicated, stored or reproduced in any form by any means; or (ii) redistributed or passed on, directly or indirectly, to any other person in whole or in part, for any purpose without the prior written consent of IRSPL.

The information contained in this report is prepared from data believed to be correct and reliable at the time of issue of this report.

IRSPL is not required to issue regular reports on the subject matter of this report at any frequency and it may cease to do so or change the periodicity of reports at any time. IRSPL is not under any obligation to update this report in the event of a material change to the information contained in this report. IRSPL has not any and will not accept any, obligation to (i) check or ensure that the contents of this report remain current, reliable or relevant; (ii) ensure that the content of this report constitutes all the information a prospective investor may require; (iii) ensure the adequacy, accuracy, completeness, reliability or fairness of any views, opinions and information, and accordingly, IRSPL and its affiliates/group companies (and their respective directors, associates, connected persons and/or employees) shall not be liable in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) of any reliance thereon or usage thereof.

Unless otherwise specified, this report is based upon reasonable sources. Such sources will, unless otherwise specified, for market data, be market data and prices available from the main stock exchange or market where the relevant security is listed, or, where appropriate, any other market. Information on the accounts and business of company(ies) will generally be based on published statements of the company(ies), information disseminated by regulatory information services, other publicly available information and information resulting from our research. Whilst every effort is made to ensure that statements of facts made in this report are accurate, all estimates, projections, forecasts, expressions of opinion and other subjective judgments contained in this report are based on assumptions considered to be reasonable as of the date of the document in which they are contained and must not be construed as a representation that the matters referred to therein will occur. Past performance is not a reliable indicator of future performance. The value of investments may go down as well as up and those investing may, depending on the investments in question, lose more than the initial investment. No report shall constitute an offer or an invitation by or on behalf of IRSPL and its affiliates/group companies to any person to buy or sell any investments.

The opinions expressed are based on information which are believed to be accurate and complete and obtained through reliable public or other nonconfidential sources at the time made. (Information barriers and other arrangements may be established where necessary to prevent conflicts of interests arising. However, the analyst(s) may receive compensation that is based on his/their coverage of company(ies) in the performance of his/their duties or the performance of his/their recommendations. In reviewing this report, an investor should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest. Additional information is, subject to the duties of confidentiality, available on request. The report is not a "prospectus" as defined under Indian Law, including the Companies Act, 2013, and is not, and shall not be, approved by, or filed or registered with, any Indian regulator, including any Registrar of Companies in India, SEBI, any Indian stock exchange, or the Reserve Bank of India. No offer, or invitation to offer, or solicitation of subscription with respect to any such securities listed or proposed to be listed in India is being made, or intended to be made, to the public, or to any member or section of the public in India, through or pursuant to this report.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

The research analysts, strategists or economists principally responsible for the preparation of this research report are segregated from the other activities of IRSPL. Information barriers and other arrangements have been established, as required, to prevent any conflicts of interests.

IRSPL may have issued other reports (based on technical analysis, event specific, short term views etc.) that are inconsistent with and reach different conclusion from the information presented in this report.

Holding of Analysts/Relatives of Analysts, IRSPL and Associates of IRSPL in the covered securities, as on the date of publishing of this report

#### IT Services | India Tata Consultancy Services | November 20, 2023

	Analyst/ Relative	Entity/ Associates
any financial interests in the company covered in this report (subject company) and nature of such financial interest	NO	NO
actual/beneficial ownership of 1% or more in securities of the subject company at the end of the month immediately preceding the date of publication of the research report or date of the public appearance;	NO	NO
any other material conflict of interest at the time of publication of the research report or at the time of public appearance	NO	NO
received any compensation from the subject company in the past twelve months for investment banking or merchant banking or brokerage services or investment advisory or depository or distribution from the subject company in the last twelve months for products/services other than investment banking or merchant banking or broker- age services or investment advisory or depository or distribution from the subject company in the last twelve months		NO
managed or co-managed public offering of securities for the subject company in the last twelve months	NO	NO
received any compensation or other benefits from the subject company or third party in connection with the research report		NO
served as an officer, director or employee of the subject company		NO
been engaged in market making activity for the subject company	NO	NO

### Analyst declaration

- The analyst responsible for the production of this report hereby certifies that the views expressed herein accurately and exclusively reflect his or her personal views and opinions about any and all of the issuers or securities analysed in this report and were prepared independently and autonomously in an unbiased manner.
- No part of the compensation of the analyst(s) was, is, or will be directly or indirectly related to the inclusion of specific recommendations(s) or view(s) in this report or based any specific investment banking transaction.
- The analyst(s) has(have) not had any serious disciplinary action taken against him/her(them).
- The analyst, strategist, or economist does not have any material conflict of interest at the time of publication of this report.
- The analyst(s) has(have) received compensation based upon various factors, including quality, accuracy and value of research, overall firm performance, client feedback and competitive factors.

IRSPL and/or its affiliates and/or its Directors/employees may own or have positions in securities of the company(ies) covered in this report or any securities related thereto and may from time to time add to or dispose of, or may be materially interested in, any such securities.

IRSPL and/or its affiliates and/or its Directors/employees may do and seek to do business with the company(ies) covered in this research report and may from time to time (a) buy/sell the securities covered in this report, from time to time and/or (b) act as market maker or have assumed an underwriting commitment in securities of such company(ies), and/or (c) may sell them to or buy them from customers on a principal basis and/or (d) may also perform or seek to perform significant investment banking, advisory, underwriting or placement services for or relating to such company(ies) and/or (e) solicit such investment, advisory or other services from any entity mentioned in thisreport and/or (f) act as a lender/borrower to such company and may earn brokerage or other compensation. However, Analysts are forbidden to acquire, on their own account or hold securities (physical or uncertificated, including derivatives) of companies in respect of which they are compiling and producing financial recommendations or in the result of which they play a key part.