AXIS CAPITAL

IT Services

Dec 10, 2024

GEN AI

Millenium Shapeshifter to Transform Services

- GenAI could generate savings of 20-40% in the software development lifecycle.
- Could *Services as a Software* be the new SaaS? Prospective TAM and margin gains hint at possibilities.
- GenAI-led efficiency gains are unarguable, but lessons of the past underscore long diffusion cycles for gamechangers.
- Outlook 2025: Global techs offer better risk-reward (lower-than-historical multiples + relative underperformance vs Indian techs).

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IT Services

GenAI: Millennial shapeshifter to transform services

IT Services | Sector Report | December 10, 2024

GenAI – our word of 2024 - could generate savings of 20-40% in the software development lifecycle, in our view. We see no risk to tech spends with these savings being ploughed back into innovative tech for better business. Prospective TAM and margin gains give credence to a tantalizing notion - of *Services as a Software*. Despite evidence of efficiency gains, we underscore the long diffusion cycles associated with major tech breakthroughs in the past. Our outlook for CY25/FY26 looks beyond GenAI to find growth improving on the back of encouraging macros and entry/exit arithmetic. Global techs offer better risk/reward given similar tailwinds and lower valuations, both historically as well as relative to Indian techs. We stay selective – our Tier 1 order of preference has Wipro, Infosys and TechM.

It's real: evidence of AI-led efficiency gains across tech functions

AI writes more than 25% of Google's new code (Google CEO Q3CY24 commentary: link), even while industry reports suggest AI-led productivity gains of 20-40%. Researchers from leading institutes who tracked productivity gains across ~5k developers in three organizations found AI boosted software-developer productivity by 26%. Interest in and use of AI is growing rapidly – Microsoft GitHub Enterprise saw client interest in AI projects grow 100% in an 18-month period with actual use growing 11.5% (Exhibits 14 & 15).

Breakthroughs diffuse slowly; IT spends to stay, *Services-as-a-Software* next?

Exponential breakthroughs like cloud computing, 3D printing, etc. have seen slow diffusion cycles before generating tangible, sector-wide gains (Exhibits 23-25). We see savings from efficiency gains being leveraged back into the business to chase more tech innovation for business. We therefore see no risks of compression in overall tech spending, we expect a trend similar to the global delivery model that played out over the early 2000s. The potential to improve margins in a services-as-software model is attractive, but we would wait to celebrate this promise. Indian IT does not have a strong track record in passing on currency gains or savings from beneficial mixes, given the fragmented competition and effort-based commercial models.

Global techs to ride the return of growth in CY25/FY26E

Indian IT has seen significant moderation in growth over FY23-25E after strong growth over FY21-23 (led by a raft of tech spends that had been deferred during Covid). Moderation in growth may be behind us, with a combination of macro improvements on demand (also confirmed by global peer commentary – Exhibit 39) and better entry/exit arithmetic are likely to drive growth recovery in CY25/FY26E. The growth set-up appears similar to the scenario at end-CY16 (when Trump assumed his first Presidency), although there was a fear of adverse action on immigration by the administration then. However, the similarities end right there. Indian tech stocks were inexpensive then, having been de-rated over FY15-17 (Exhibit 50). In contrast, Indian techs today trade at similar-to-higher multiples vs the past 3-5-year means. Global techs offer better risk-reward through a combination of lower-than-historical multiples and relative underperformance vs Indian techs. Our selective preferences for Tier 1 are Wipro, Infosys and TechM.

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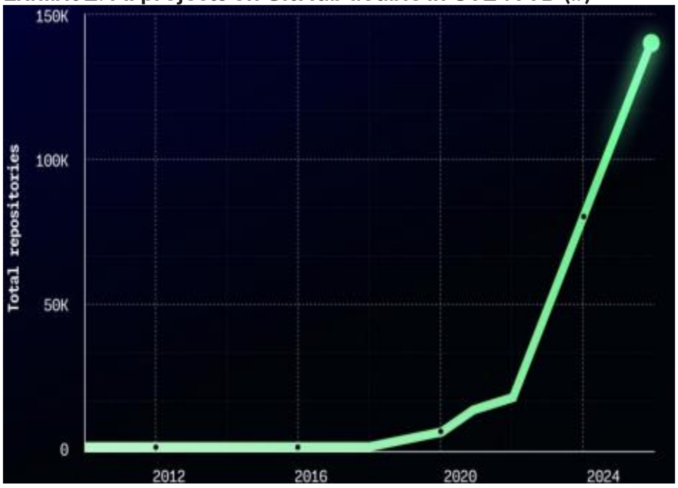
Story in Charts

Exhibit 1: Adoption of Co-pilot by Enterprise clients has increased rapidly

In '000	Mar'23	Jun'23	Sep'23	Dec'23	Mar'24	Jun'24	Sep'24
Co-pilot Enterprise customers	10	27	37	50	NA	77	119
QoQ growth, %		170.0%	37.0%	35.1%	NA	NA	55.0%

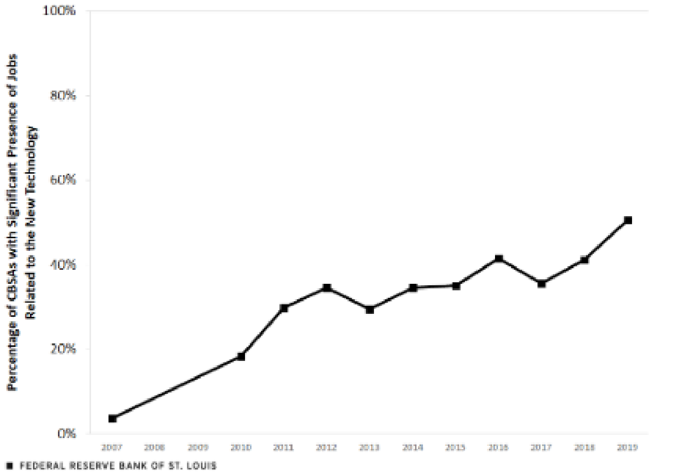
Source: Company, Axis Capital, Microsoft has a June year-end

Exhibit 2: AI projects on GitHub double in CY24YTD (#)



Source: GitHub, Axis Capital

Exhibit 3: Cloud adoption was more gradual



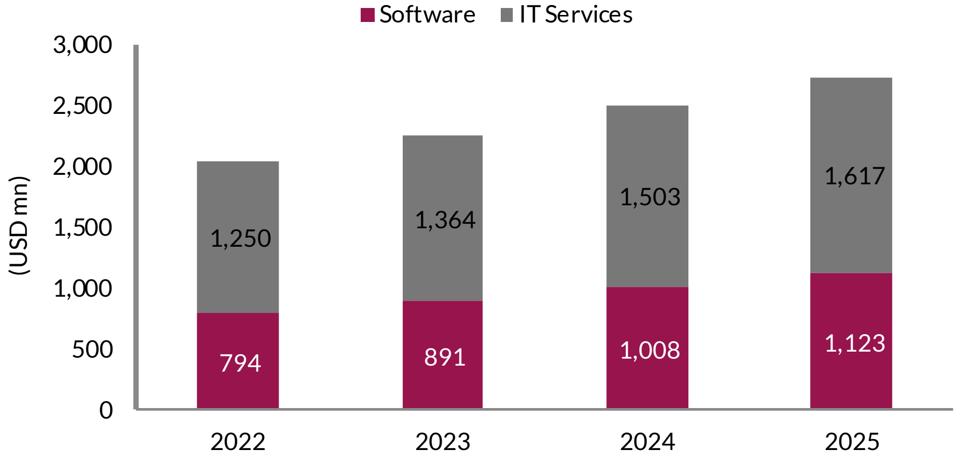
Source: Federal Reserve Bank of St. Louis, Axis Capital

Exhibit 4: Overall tech spends grew in the early 2000s despite increasing adoption of offshoring which was deflationary

USD Bn	CY00	CY01	CY02	CY03	CY04	CY05	CY06	CY07
IT Services Spend	404	434	447	454	475	499	527	564
YoY change		7.4%	3.0%	1.6%	4.6%	5.1%	5.6%	7.0%

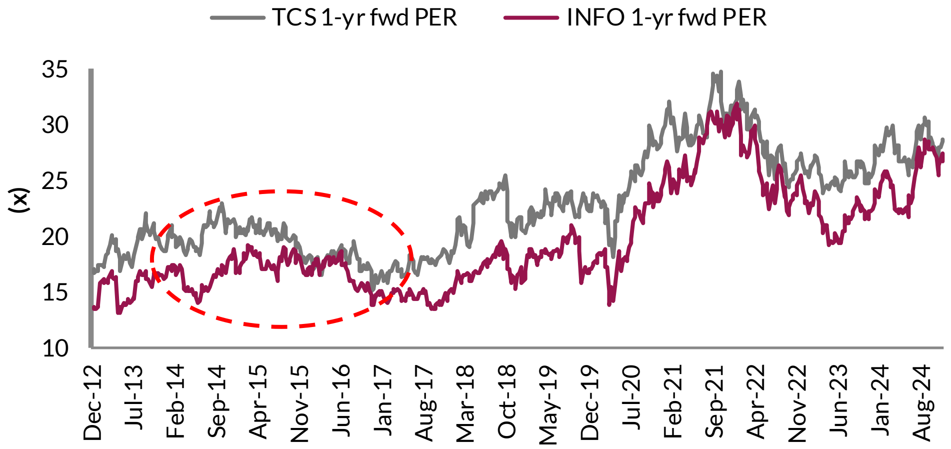
Source: Gartner, Axis Capital

Exhibit 5: IT services spend is a bigger pool than software and GenAI offers potential to pivot to the 'Services as a Software' model



Source: Axis Capital

Exhibit 6: Strong trend for Indian IT during Trump's first term supported by favorable starting point and growth recovery through CY17/18



Source: Bloomberg, Axis Capital

Exhibit 7: Tier-1 techs will likely see recovery to high-single-digit growth in FY26E

YoY cc growth	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
TCS	7.1%	-0.8%	15.4%	13.7%	3.4%	5.7%	7.6%
Infosys	9.8%	5.0%	19.7%	15.4%	1.4%	5.5%	8.8%
HCL Tech	16.7%	1.1%	12.7%	13.7%	5.0%	-1.7%	9.1%
Wipro*	3.9%	-2.3%	27.0%	11.5%	-4.4%	5.4%	4.9%
Tech Mahindra	5.6%	-2.5%	16.7%	14.5%	-4.7%	1.3%	7.6%

Source: Companies, Axis Capital, *Note: IT services growth for Wipro

Exhibit 8: Indian IT names continue to trade above their 3/5/10 year averages

Vs. average valuations (including Covid upswing)							
		3-year average		5-year average		10-year average	
	Current P/E	3Y avg. P/E	Premium/Discount	5Y avg. P/E	Premium/Discount	10Y avg. P/E	Premium/Discount
TCS	29.8	27.5	9%	27.4	9%	23.7	26%
Infosys	27.5	24.4	13%	24.0	15%	20.4	35%
HCLT	28.0	21.0	33%	19.4	44%	16.9	65%
Wipro	24.9	19.7	26%	19.6	27%	17.2	44%
TechM	29.9	21.0	42%	19.1	56%	16.6	80%
LTIM	34.0	30.3	12%	29.3	16.0%	NA	NA
Mphasis	31.0	25.8	20%	23.9	30.0%	19.2	61.7%
Coforge	47.4	30.4	56%	29.1	63.2%	21.1	124.7%
Persistent	60.2	37.8	59%	32.1	87.7%	23.6	155.5%
Zensar	24.2	20.0	21%	18.1	33.6%	14.7	64.8%
LTTS	46.8	49.0	-4%	37.5	25.0%	NA	NA
KPIT	49.3	57.4	-14%	56.6	-12.9%	NA	NA

Source: Bloomberg, Axis Capital

Exhibit 9: Global techs trade lower than 3/5-year multiples; Indian techs trade higher vs average valuations (including Covid upswing)

		3-year average		5-year average		10-year average	
	Current P/E	3Y avg. P/E	Premium/ Discount	5Y avg. P/E	Premium/ Discount	10Y avg. P/E	Premium/ Discount
Accenture	27.5	26.0	6.1%	27.1	1.7%	22.7	21.5%
Capgemini	12.7	15.7	-18.8%	16.1	-21.0%	15.9	-19.7%
Cognizant	16.3	15.2	7.1%	16.0	1.9%	16.8	-3.2%
EPAM	21.8	27.0	-19.3%	35.0	-37.7%	29.9	-27.3%
Endava	16.5	26.8	-38.3%	34.5	-52.0%	39.0	-57.6%
Globant	31.8	33.0	-3.8%	42.9	-25.9%	36.2	-12.2%
Genpact	13.5	13.5	-0.2%	15.3	-11.7%	17.3	-21.8%

Source: Bloomberg, Axis Capital

Exhibit 10: Valuation snapshot

Stock	CMP	Reco	TP	EPS (Rs)			EPS CAGR (%)	P/E (x)			EV/E (x)			EV/S (x)		
	(Rs)		(Rs)	FY25E	FY26E	FY27E	FY24-27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E
TCS	4,433	REDUCE	4,300	136.1	155.4	169.4	9.3%	32.6	28.5	26.2	22.9	20.2	18.7	6.0	5.5	5.0
Infosys	1,949	ADD	2,050	63.2	71.4	80.3	8.3%	30.8	27.3	24.3	19.3	16.9	15.1	4.6	4.1	3.7
HCLT	1,936	REDUCE	1,800	65.3	74.4	81.9	12.3%	29.6	26.0	23.6	18.8	16.4	14.9	4.1	3.7	3.4
Wipro	308	ADD	330	12.1	13.2	14.3	11.2%	25.5	23.3	21.5	16.1	14.4	13.0	3.2	2.9	2.6
TechM	1,764	ADD	1,920	51.1	66.7	87.2	36.1%	34.5	26.5	20.2	22.6	17.7	13.9	3.1	2.8	2.6
Tier 1 IT Mean							**15.4%**	**30.6**	**26.3**	**23.2**	**19.9**	**17.1**	**15.1**	**4.2**	**3.8**	**3.5**
Tier 1 IT Median							**11.2%**	**30.8**	**26.5**	**23.6**	**19.3**	**16.9**	**14.9**	**4.1**	**3.7**	**3.4**
LTIMindree	6,579	REDUCE	5,800	164.5	197.1	229.2	14.1%	40.0	33.4	28.7	28.1	23.4	20.1	5.0	4.3	3.9
Mphasis	3,182	REDUCE	2,850	92.7	108.0	125.7	15.1%	34.3	29.4	25.3	21.7	18.6	16.1	4.0	3.5	3.1
Persistent	6,345	SELL	3,880	87.5	109.3	130.4	22.5%	72.5	58.1	48.6	47.0	37.8	31.9	8.1	6.8	5.8
Coforge	9,009	SELL	6,700	148.8	202.5	236.0	22.1%	60.5	44.5	38.2	29.4	23.3	20.1	5.0	4.0	3.5
Zensar	803	ADD	740	28.2	31.6	36.0	7.3%	28.5	25.4	22.3	19.4	16.6	14.3	3.0	2.6	2.3
Tier 2 IT Mean							**16.2%**	**47.2**	**38.2**	**32.6**	**29.1**	**23.9**	**20.5**	**5.0**	**4.3**	**3.7**
Tier 2 IT Median							**15.1%**	**40.0**	**33.4**	**28.7**	**28.1**	**23.3**	**20.1**	**5.0**	**4.0**	**3.5**
LTTS	5,369	REDUCE	4,950	126.8	149.4	172.2	11.9%	42.3	35.9	31.2	27.7	23.1	20.2	5.2	4.5	4.0
Tata Elxsi	7,403	SELL	6,600	134.4	151.7	171.8	10.6%	55.1	48.8	43.1	39.9	34.5	30.2	11.4	9.9	8.7
KPIT	1,539	ADD	1,800	30.1	34.9	42.0	24.4%	51.1	44.1	36.7	32.4	27.4	22.7	6.9	5.8	4.8
Tata Tech	943	REDUCE	910	16.5	20.1	23.7	12.4%	57.1	47.0	39.7	37.8	32.1	27.4	6.9	6.0	5.2
ER&D Mean							**14.8%**	**51.4**	**44.0**	**37.7**	**34.5**	**29.3**	**25.1**	**7.6**	**6.5**	**5.7**
ER&D Median							**12.1%**	**53.1**	**45.5**	**38.2**	**35.1**	**29.8**	**25.0**	**6.9**	**5.9**	**5.0**
Firstsource	381	ADD	400	8.9	11.8	14.7	26.1%	43.0	32.4	26.0	22.2	18.0	15.2	3.4	2.9	2.5

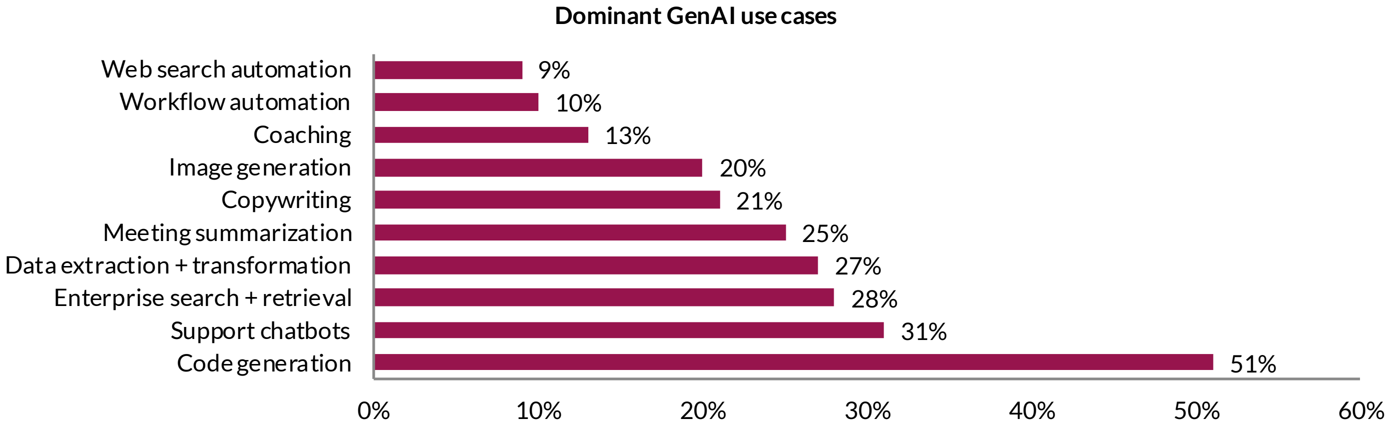
Source: Bloomberg, Axis Capital

GenAI: everyone's aboard

ChatGPT, OpenAI's text-generating AI chatbot, has catapulted in capability and conversion since it appeared innocuously enough on the world's screen in Nov 2022. In the 24 months since its debut, subsequent upgrades in large language models and mounting capabilities have made GenAI a must have for business across the globe. For most, doubts and discussions revolve around applications and modalities but not the adoption itself. Tech services saw GenAI projects transition from pilot to mainstream within CY2024, even as the macroeconomic set-up over the period has driven increased scrutiny around near-term RoI amongst stakeholders. ISG estimates that the spending on GenAI initiatives will increase ~50% YoY in CY24E and account for 6.5% of the enterprise IT spend by end-CY25E vs 4.3% of CY24's IT spend. As we show below, the 11x growth in enterprise customers for GitHub Copilot between Mar'23 and Sep'24 highlights that enterprises are willing to accelerate their journey towards the adoption of GenAI tools. Google's declaration that over 25% of its new software code is generated using GenAI tools (Q3CY24 earnings call) affirms the possibilities of the technology.

IT-services companies have noted that all new deal conversations in recent quarters have used GenAI in some capacity. This widespread inclusion underscores the growing importance of AI in shaping future business landscapes.

Exhibit 11: Enterprises are investing mainly in practical, RoI-driven use-cases

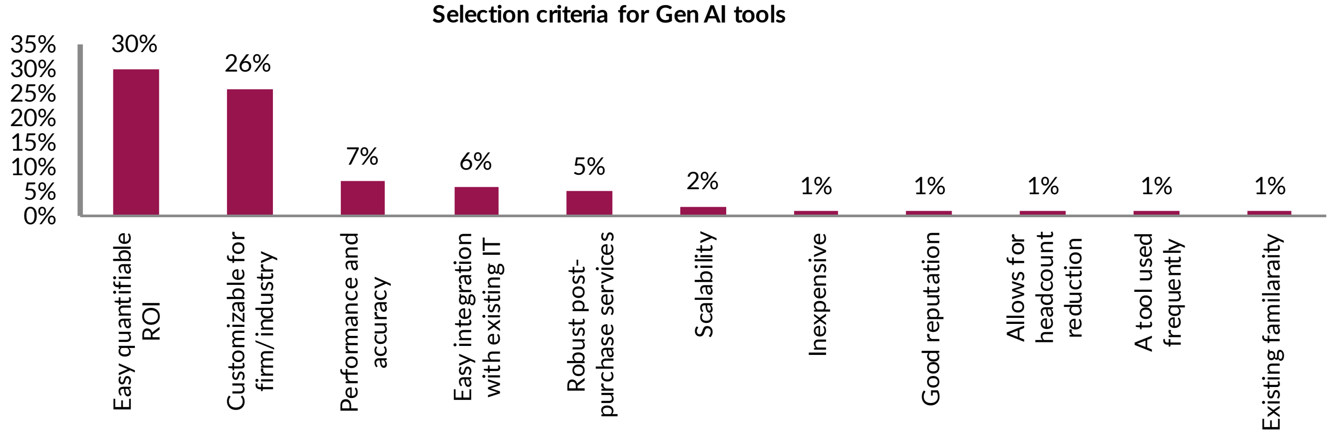


Source: Menlo Ventures, Axis Capital

The ramp-up in AI-driven transformation spending indicates a strategic shift towards leveraging AI for competitive advantage and operational excellence. Several Tier-1/2 companies have reported an increase in transformation spending driven by AI-backed capex from clients. The spending environment is cautious yet; in this climate, it is telling that businesses are willing to invest in transformative AI projects that promise substantial long-term benefits.

A study by Menlo VC suggests that enterprises choosing GenAI applications prioritize RoI and segment-specific customization. Interestingly, price is not a significant concern, with only 1% of the surveyed enterprise leaders citing it as a selection factor (Exhibit 12).

Exhibit 12: Enterprises prioritize value over quick wins in GenAI adoption



Source: Menlo Ventures, Axis Capital

Big companies ride the GenAI wave

The tangible RoI observed in a subset of use-cases across companies highlights the increasing adoption and leveraging of AI tools across enterprises. These trends indicate that AI implementation will continue to accelerate, leading to enhanced productivity and operational efficiency. As businesses benefit from AI, the momentum for its adoption is expected to grow, further integrating AI into core business processes and strategies. We discuss the key takeaways from what the leading tech companies have highlighted.

Alphabet CEO flagged that over a quarter of its codes are now AI-generated

Alphabet

In its Sep'24 earnings call, Alphabet CEO Sundar Pichai expressed strong confidence in the transformative potential of AI and highlighted the key steps Google is taking in this domain. Pichai revealed that over 25% of new code at Google is now generated by AI. This AI-generated code undergoes thorough review and approval by human engineers, enabling developers to work more efficiently. By automating routine coding tasks, AI allows developers to focus on solving more complex problems, thereby accelerating innovation and productivity.

Microsoft GitHub has seen an increase in both its active client base as well as its enterprise customers over the period

Microsoft GitHub

Microsoft acquired GitHub, a web-based platform created to help developers store, manage, and collaborate on code, in 2018. GitHub has since integrated its offerings more closely with Microsoft's own ecosystems like Azure and Visual Studio Code. In 2021, Microsoft launched GitHub Copilot, an AI-powered coding assistant developed by GitHub in collaboration with OpenAI which essentially allows coders to write codes faster.

Exhibit 13: GitHub's active paid subscribers have increased multifold in recent quarters

(mn)	Sep'23	Dec'23	Mar'24	Jun'24	Sep'24
Active GitHub paid subscribers	>1	>1.3	1.8	2.9	NA
QoQ reported growth, %		30%	35%	60%	NA

Source: Company, Axis Capital, Microsoft has a June year-end

Microsoft's GitHub active paid subscribers have increased from sub-1 mn subscribers in Sep'23 to ~4.5 mn in Sep'24. In its Sep'24 earnings call, the company highlighted the introduction of its next phase of AI code generation, thus making GitHub Copilot agentic across the developer workflow. In terms of its enterprise customers, Microsoft GitHub Copilot has seen a 55% increase sequentially in Sep'24 and an 11x jump since its introduction in Mar'23.

Exhibit 14: Enterprise customers have increased Copilot adoption in the recent period

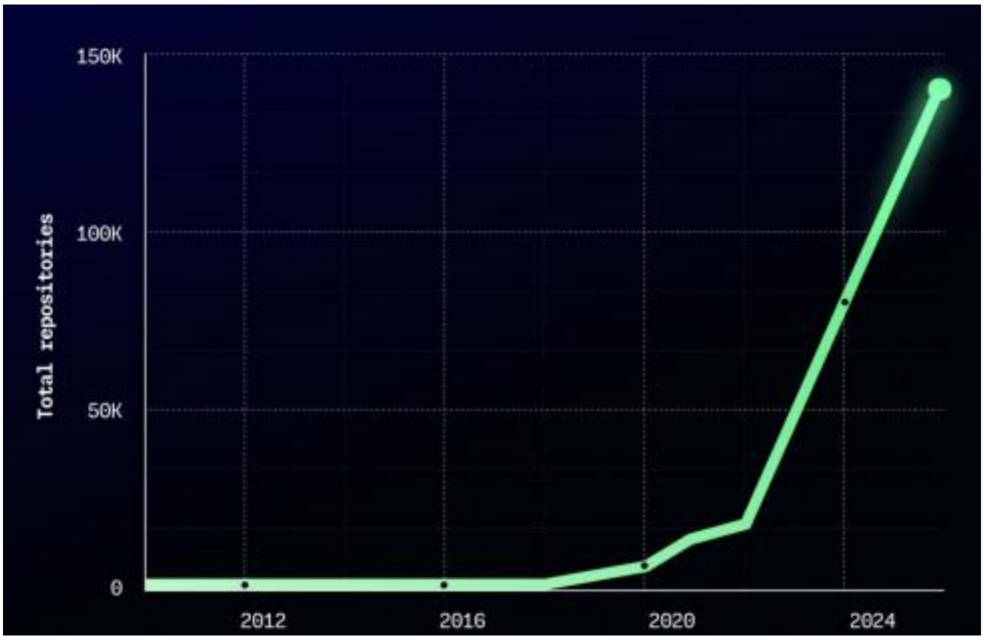
('000)	Mar'23	Jun'23	Sep'23	Dec'23	Mar'24	Jun'24	Sep'24
Co-pilot Enterprise customers	10	27	37	50	NA	77	119
QoQ growth, %		170.0%	37.0%	35.1%	NA	NA	55.0%

Source: Company, Axis Capital, Microsoft has a June year-end

The number of AI projects on GitHub have doubled in one year

In 2024, GenAI transitioned from the hype of 2023 to delivering tangible results, as evidenced by data from GitHub. Developers on GitHub created over 70,000 new public and open-source GenAI projects in 2024, which make up almost 60% of the total contributions to GenAI projects on GitHub.

Exhibit 15: Number of AI projects on GitHub have doubled in one year



Source: GitHub, Axis Capital

GenAI has become a key part of the tech stack for developers. More developers are sharing their AI projects publicly on GitHub, which shows they are working more openly and finding new ways to use AI. Instead of just helping to write code, AI is now a crucial part of building software. GitHub in its Octoverse 2024 highlighted that developers want smaller AI models that work well and do not need a lot of computing power, especially for use in smartphones. The most popular new open-source AI project this year was ollama/ollama, which indicates that many developers are trying out AI models that can run on local devices. As these models get smaller and more efficient, we expect even more developers to use them in their projects.

Accenture

Accenture too views AI as the biggest growth catalyst over the next decade; Accenture achieved USD 3 bn in new GenAI bookings in FY24

Like its peers, Accenture also views AI as the new digital, representing both a transformative technology and a new way of working. The company believes that the full value of AI will be realized through strategies focused on productivity and growth, integrating AI into every part of the enterprise. The introduction of GenAI is seen as a pivotal development, expected to drive significant growth for Accenture and its clients over the next decade, like the impact of digital technology in the past decade.

Accenture has made notable progress in its AI journey, achieving USD 3 bn in new GenAI bookings during FY24, including USD 1 bn in Aug'24 quarter alone. This performance translated into nearly USD 900 mn in revenue for the FY-ended Aug'24. This growth underscores the increasing demand for AI solutions and Accenture's ability to meet this demand effectively by getting into small deals with clients, thus accelerating its growth here.

Exhibit 16: Accenture's GenAI bookings has seen rapid growth through recent quarters

(USD mn)	Aug'24	Nov'23	Feb'24	May'24	Aug'24
GenAI new bookings	NA	450	600	900	1,000
QoQ growth, %	NA	NA	33.3%	50.0%	11.1%

Source: Company, Axis Capital, Accenture has an August year end

Exhibit 17: GenAI bookings were ~USD 3 bn in FY-ended Aug'24

(USD mn)	Aug'24	Nov'23	Feb'24	May'24	Aug'24
YTD GenAI new bookings	300	450	1100	2000	3000
QoQ growth, %		50.0%	144.4%	81.8%	50.0%

Source: Company, Axis Capital, Accenture has an August year end

Accenture has steadily increased its data and AI workforce, reaching ~57,000 practitioners. This progress is in line with the company's goal of achieving 80,000 practitioners by the end of FY-ending Aug'26. Accenture anticipates that preparing enterprise data, essential for AI, will become a major growth area. Accenture sees talent as a key agenda item for the C-suite, essential for achieving reinvention and maximizing the benefits of AI.

Accenture's AI Implementation and productivity gains

Accenture has highlighted various tangible benefits it has generated for its clients with the implementation of AI recently. We summarize a few.

Exhibit 18: Accenture's productivity gains through actual use cases reflects tangible benefits

	Gen AI-led benefits generated for clients
Financial Services	Accenture within financial services, particularly in banking and insurance, is working with a leading US retirement firm where they are transforming retirement record-keeping capabilities using AI, automation, and cloud technologies. This collaboration aims to make record-keeping processes more efficient and user-friendly, supporting their back-end operations and technology. The result is faster plan changes for sponsors and easier account openings and investment selections for participants, ultimately making retirement planning more accessible, efficient, and personalized.
Telecom	Accenture's Managed Services program is consolidating IT vendors, boosting productivity by an estimated 60%, and cutting costs by half. By integrating Gen AI tools, Accenture is infusing Gen AI tools to enhance the software development lifecycle and automate manual tasks like resolving technical issues with customer orders, invoices, or service availability. This automation frees employees' man hour to focus on strategic growth initiatives and improves the overall customer experience.
Security	Accenture is partnering with the Kuwait Government Central Agency for Information Technology to enhance the security of its public services and critical infrastructure. By implementing a scalable platform powered by Gen AI, Accenture enables the agency to respond to evolving cyber threats up to 60% faster than traditional technologies, improving detection, response, and containment.

Source: Company, Axis Capital, Described as part of Accenture's Aug'24 earnings call

Cognizant and Microsoft expanded their partnership to accelerate the adoption of GenAI across enterprises. As part of this partnership, Cognizant acquired 25,000 Microsoft 365 Copilot seats

Cognizant

Companies are partnering to generate more synergies as they try to increase GenAI enterprise adoption and work towards tangible use cases. In the Jun'24 quarter, Cognizant announced a partnership with Microsoft which leverages Microsoft's Copilot and Cognizant's advisory and digital transformation services to help businesses operationalize AI and drive industry transformation. As part of this partnership, Cognizant has taken up 25k Microsoft 365 Copilot licenses, along with 500 Sales Copilot and 500 Services Copilot seats. These tools will be used to enhance productivity, streamline workflows, and transform customer experiences. Cognizant aims to deploy Microsoft 365 Copilot for a million users within its global 2,000 clients and across 11 industries. Additionally, through Cognizant's Synapse skilling program, the company has trained 35k developers on GitHub Copilot, with plans to train an additional 40k developers. This partnership was a part of the broader organization strategy wherein Cognizant in CY23 announced plans to invest USD 1 bn in AI-led initiatives, platforms, and capabilities.

Exhibit 19: Cognizant GenAI-led engagements have more than doubled in two quarters

	Mar'24	Jun'24	Sep'24
Number of engagements	450	750	1000
QoQ growth, %		66.7%	33.3%
GenAI opportunities in the pipeline	500	600	NA
QoQ growth, %		20.0%	NA

Source: Company, Axis Capital

Cognizant is observing significant traction in four categories of GenAI use-cases. The highest velocity is seen in applying AI to software development cycles, followed by customer and employee experience, content aggregation, and early use cases in content generation. There is broad-based demand across industries, in particular: (i) financial services – in fraud detection, credit risk assessment, and regulatory compliance; (ii) healthcare – in drug discovery, medical imaging, and transcription, and (ii) manufacturing – in design optimization and predictive maintenance.

In the third quarter, Cognizant secured a USD 200 mn deal with a global technology client to transform customer support operations using GenAI.

Cognizant's AI Implementation and productivity gains

Cognizant is leveraging its platforms to co-create with clients, laying the foundation of its AI strategy with the Cognizant Data and Intelligence Toolkit. This toolkit is designed to increase speed, reduce costs, and enhance the predictability of clients' data modernization journeys.

Cognizant has implemented over 225 projects, supporting more than 120 clients. The Flowsource platform, a developer workbench that integrates human and AI efforts, is a key component in improving productivity. Currently, Cognizant is in various phases of testing and adoption for more than 150 clients. Utilizing AI tooling, the company generates 150k lines of accepted code per month, translating to an annualized 2 mn lines of code integrated into client projects. Cognizant is clearly harnessing AI to drive productivity, gains that it shares with clients.

TCS has seen a significant increase in GenAI engagements, rising from 270 to over 600 in a single quarter (Q2FY25), reflecting strong client interest and adoption

TCS

The number of projects moving into production has surged from eight to 86, highlighting a shift towards practical applications of AI. Many projects have gone live, focusing on dynamic pricing, customer experience transformation, and operational efficiencies. Clients are leveraging AI to enhance operational efficiency, particularly in areas such as customer experience transformation, and supply chain modernization. This demonstrates TCS's commitment to driving innovation and delivering tangible benefits through AI technologies.

Exhibit 20: TCS' GenAI projects moving into production increased ~10x in Q2FY25

	Jun'24	Sep'24
GenAI based projects moving into production	8	86
QoQ growth, %		975.0%

Source: Company, Axis Capital, TCS has a March year-end

Exhibit 21: TCS' GenAI-led engagements have also seen a sharp rise sequentially

	Jun'24	Sep'24
GenAI led client engagements	270	600
QoQ growth, %		122.2%

Source: Company, Axis Capital, TCS has a March year-end

In Q1FY25, TCS had highlighted that its GenAI pipeline doubled to ~USD 1.5 bn in that quarter alone, testifying to a strong uptick in GenAI-led demand. Though this number was not provided for Q2FY25, arguably it has only increased since, given how the enterprise adoption of GenAI has been swelling up.

TCS's AI implementation and productivity gains

The company has highlighted that GenAI continues to dominate conversations with IT and business leaders in every market. TCS is seeing strong interest levels and engagement from customers on GenAI. TCS believes that as the technology matures, it will see more instances of activity level automation and eventually end-to-end value-chain transformation in combination with other technologies. The company believes it is then that the mainstream adoption of this technology will really take off.

We lay out some of the key GenAI-focused initiatives and projects that TCS has been working on over the last 12 months.

Exhibit 22: TCS has been active in AI-led conversations in the past 12 months

Source: Company, Axis Capital

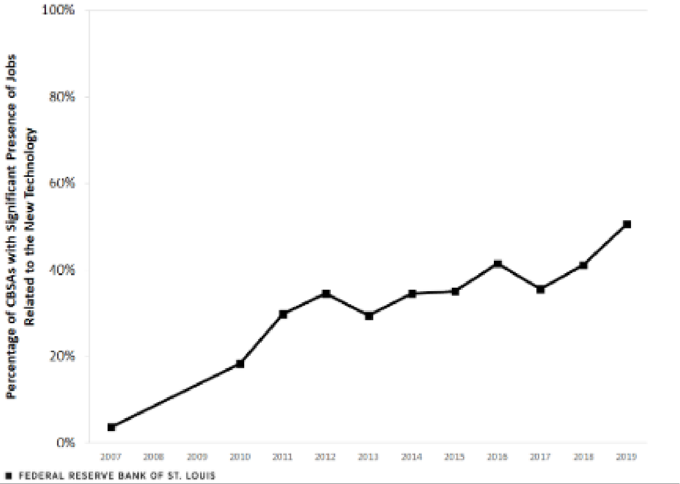
GenAI adoption gains may be gradual

The diffusion cycle of GenAI is poised to be a fascinating journey, especially when compared to previous technological breakthroughs such as cloud computing, smartphones, and 3D printing. Historically, cloud computing and 3D printing experienced slower diffusion cycles, with tangible benefits becoming evident only years after their initial introduction. In contrast, smartphones witnessed rapid early adoption, quickly transforming various aspects of daily life.

As GenAI continues to evolve, its adoption and integration into various sectors will likely follow a similar trajectory, gradually revealing its full potential and transformative power

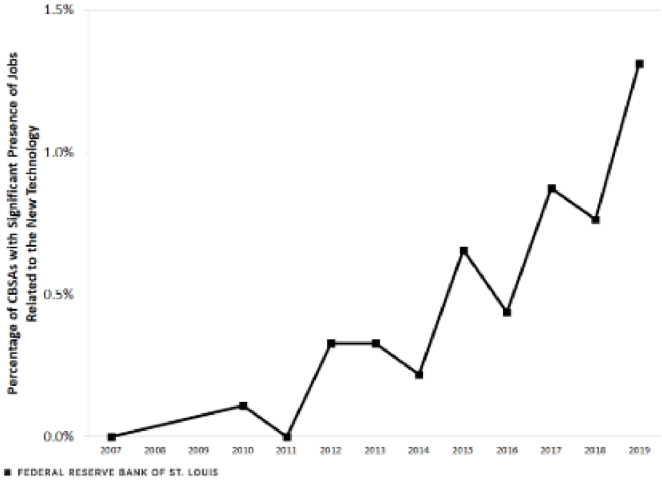
A study by the Federal Reserve Bank of St. Louis suggests that while recent technologies can achieve relatively swift adoption, the material and tangible gains from GenAI, driven by exponential breakthroughs, may take longer to manifest. This trend mirrors the course of large-scale technological advancements seen with cloud computing, where significant impact was realized over an extended period. We note that while the excitement around cloud computing began much before 2010, it started to become mainstream only around 2017-19, with Covid driving a greater shift. Several industry estimates suggest that less than 30% of workloads have moved to the cloud as of now, highlighting the tendency of slow diffusion in transformative tech. As GenAI continues to evolve, its adoption and integration into various sectors will likely follow a similar trajectory, gradually revealing its potential and transformative power.

Exhibit 23: Cloud computing – slow to reflect in job openings…



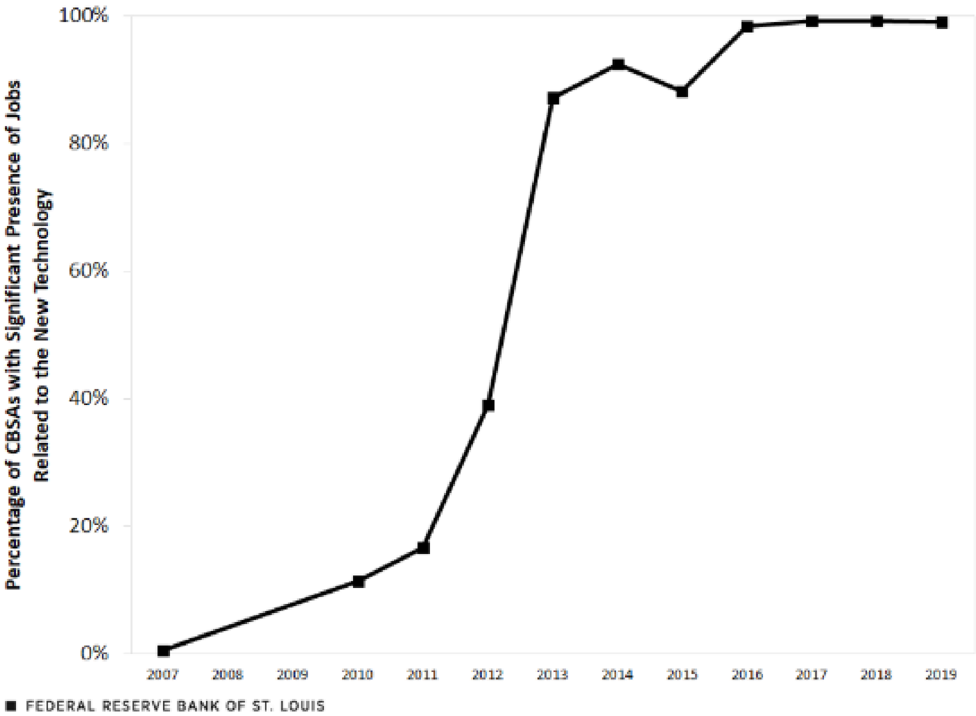
Source: Federal Reserve Bank of St. Louis, Axis Capital

Exhibit 24: …as well as in 3D printing



Source: Federal Reserve Bank of St. Louis, Axis Capital

Exhibit 25: Smart phones caught on faster



Source: Federal Reserve Bank of St. Louis, Axis Capital

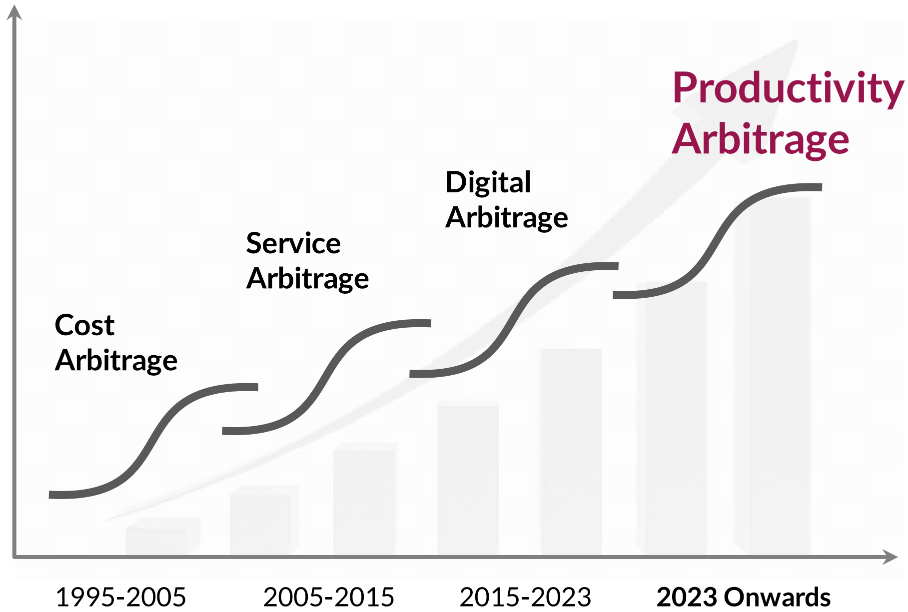
Increasing evidence of productivity gains, though estimates vary

There remains a disparity in the assessment of efficiency gains from GenAI tools across companies and industries, with estimates varying from 20% to 40% depending on studies and segments. Recent commentary from Indian IT companies like TCS, LTIM, and HCL reiterate the potential productivity gains from embedding AI in client operations.

TCS has also highlighted the GenAI-led productivity efficiencies (Jun'24 earnings discussion) recorded in 100-150 test projects. The company noted software productivity rising 5-25%, depending on the phase of the project.

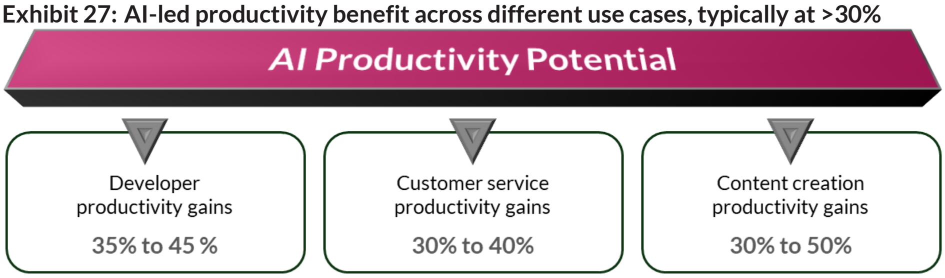
LTIM, in its Investor's Day 2024, shared its AI-driven actions and specific use cases (Exhibit 20), referring to the current era (2023 onwards) as a period driven by productivity arbitrage where AI can potentially lead to efficiency gains.

Exhibit 26: LTIM sees GenAI-led productivity leverage becoming mainstream



Source: LTIM Analyst Meet Presentation, Axis Capital

Exhibit 27: AI-led productivity benefit across different use cases, typically at >30%



Source: LTIM Analyst Meet Presentation, Axis Capital

Copilot fuels 26% increase in productivity: study

A study conducted by researchers from Princeton University, MIT, the University of Pennsylvania, and Microsoft Research found GitHub Copilot fuelling a 26.1% increase in the number of completed tasks by their subjects. The researchers had set out to determine the impact of GenAI tools like GitHub Copilot on software developer productivity and concluded that concluding that GenAI could enhance productivity and speed, especially for those at the early stages of their careers. Highlights of the study:

The findings revealed a notable boost in productivity, with developers using GitHub Copilot experiencing a 26.1% increase in the number of completed task.

- **Participants**: (i) Microsoft, (ii) Accenture, and (iii) an anonymous Fortune 100 electronics manufacturing company.
- **Sample size**: Microsoft had 1,521 software developers in the study, Accenture had a sample size of 316 developers, while the third company had a sample size of 3,030 individuals.
- **Key findings**:
  - **Higher productivity**: The findings revealed a notable boost in productivity, with developers using GitHub Copilot experiencing a 26.1% increase in the number of completed tasks.
  - **Speed and efficiency**: This improvement was accompanied by visible gains in coding efficiency and task completion rates.
  - **Valuable tool for newbies**: Less-experienced developers and those in junior positions showed higher adoption rates and greater productivity gains, indicating that GenAI tools can be particularly beneficial for newer and less-experienced developers.

GenAI efficiencies likely to be reinvested, overall spends intact

In our view, AI technology will serve as a competitive advantage to create new business opportunities and operating models. We do not subscribe to concerns that AI-led cost efficiencies in software development cycles will lead to a potential dilution of opportunity since the commercial models of most Indian tech services firms have revolved around effort/T&M-based billing. We expect the savings gained through leveraging new technologies to be reinvested towards ever more ambitious pursuits of tech innovation for better business. History bears this out - offshoring of IT through the early 2000s, which brought costs down ~60-65% than the proximity model, did not result in shrinking IT services spends. IT services outlay continued to grow at their natural pace, with the offshoring gains reinvested to leverage technology across other business initiatives.

Exhibit 28: Offshore deflation did not impact the overall IT Services spend

Source: Axis Capital

Exhibit 29: Overall tech spends grew despite increasing adoption of offshoring, which was deflationary

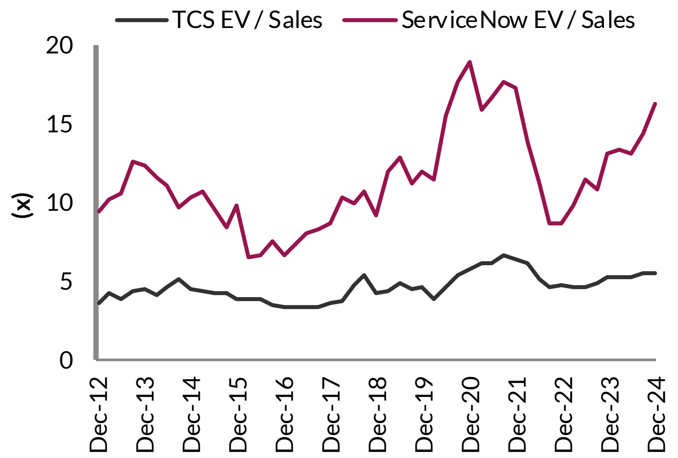
USD Bn	CY00	CY01	CY02	CY03	CY04	CY05	CY06	CY07
IT Services Spend	404	434	447	454	475	499	527	564
YoY change		7.4%	3.0%	1.6%	4.6%	5.1%	5.6%	7.0%

Source: Gartner, Axis Capital

Services as a Software – upended SaaS to fuel Indian IT margin gains?

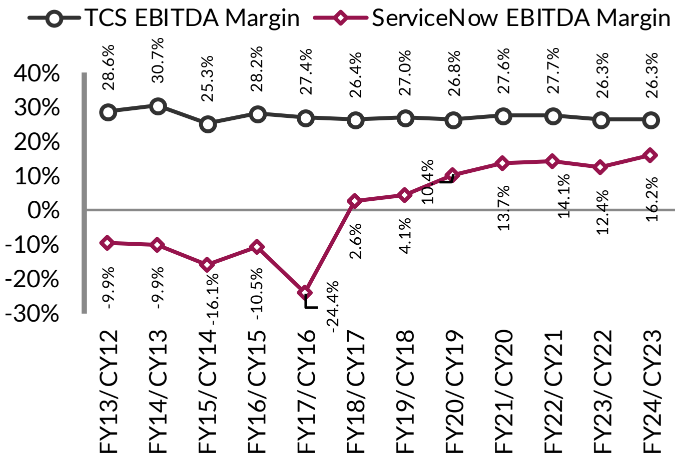
Indian IT's commercial model has largely relied on effort-based or T&M billing. Then came the bid for higher gross margins software products which pivoted towards the Software-as-a-Service (SaaS) model. Given their higher scalability and higher margin profile, software companies and SaaS businesses have enjoyed higher valuation multiples relative to consulting or managed services businesses.

Exhibit 30: ServiceNow vs TCS EV/sales



Source: Bloomberg, Axis Capital

Exhibit 31: Service Now's margins have improved while TCS's margins have come off over time



Source: Bloomberg, Axis Capital

The *Services-as-a-Software* idea is predicated upon services being delivered on an outcome basis, moving away from the traditional, labour-intensive services model that has been associated with Indian IT since its infancy. This has led to Indian IT struggling to break the linearity of headcount growth and revenue growth over time. Exhibit 32 highlights how revenue growth and headcount CAGR have been closely corelated for Indian IT over the past 5 and 10 years.

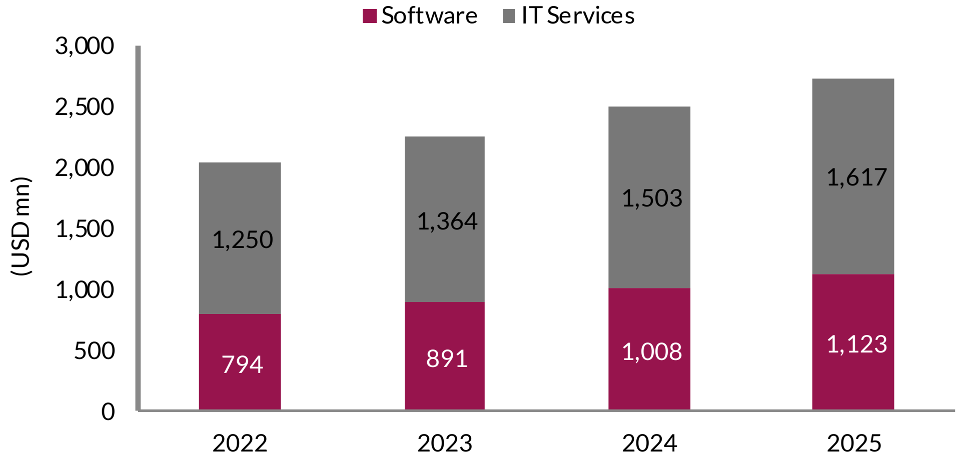
Exhibit 32: Indian IT has not been able to decouple revenue growth from headcount expansion

	Revenue CAGR		Headcount CAGR	
Tier-1	**5 yr**	**10 yr**	**5 yr**	**10 yr**
Infosys	9.5%	8.4%	6.8%	7.1%
TCS	6.8%	8.0%	7.2%	7.2%
Wipro	5.9%	5.0%	6.3%	4.8%
HCL Tech	9.0%	9.5%	10.5%	9.7%
TechM	4.8%	7.3%	3.7%	5.0%
Cognizant	3.7%	8.1%	3.8%	6.8%
	Revenue CAGR		**Headcount CAGR**	
Tier-2	**5 yr**	**10 yr**	**5 yr**	**10 yr**
LTIM	12.8%	14.2%	11.0%	NA
Persistent	19.8%	15.8%	19.1%	11.7%
Coforge	16.2%	11.3%	19.2%	11.5%
Mphasis	7.7%	4.8%	5.9%	-0.9%
Zensar	0.9%	4.5%	1.2%	4.3%

Source: Companies, Axis Capital

The 'Managed Services as a Software' model increasingly leverages AI to enhance service delivery through Agentic AI and thereby aims at driving better margins over time. This transition is not easy, because Indian IT companies have excelled at effort-based commercial models. Some the Indian techs have spoken about the ongoing transition as the age of 'productivity arbitrage' compared to the 'cost or talent' arbitrage that formed the historical bedrock of growth.

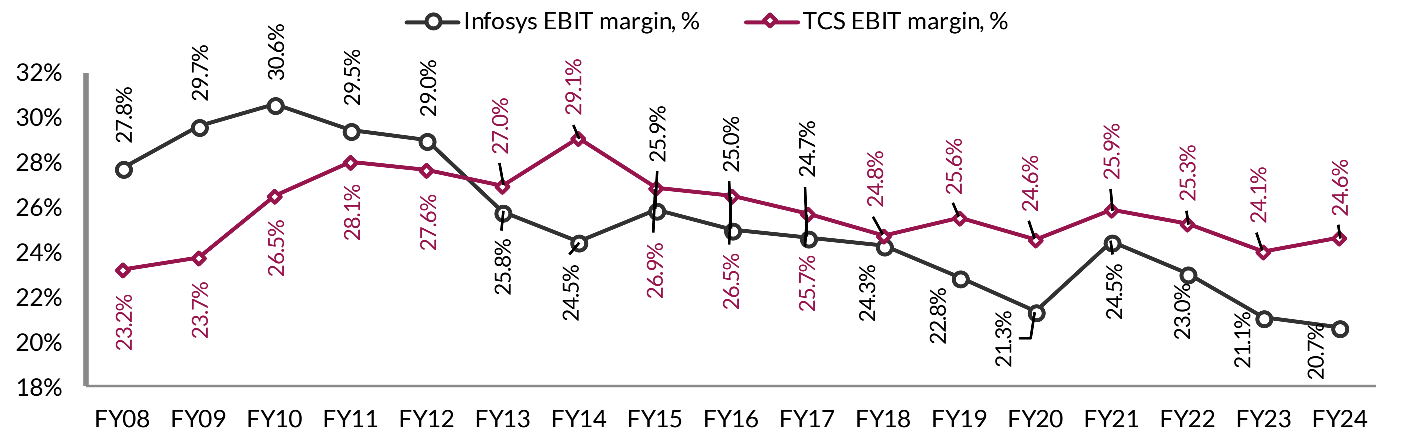
Exhibit 33: Global services spend is ~1.5x of software spend, with AI providing an opportunity to pivot



Source: Axis Capital

However, because of the inherent commercial models and the fragmented nature of the business, Indian IT has struggled to retain either currency gains over time or the delivery model change (higher offshore-mix post Covid, as an example). The USD appreciated from USD/INR of ~Rs 40 in FY08 to ~Rs 82.8 in FY24; however, TCS's EBIT margin has been at 23-24% over a 16-year period (despite the theoretical margin sensitivity of every 1% currency depreciation aiding margin by 20-25 bps). Similarly, the significant savings from higher offshore delivery and travel/facility expenses post Covid in FY21 were simply reinvested into businesses after the initial improvement in FY21 and H1FY22.

Exhibit 34: Indian IT has been unable to keep currency-led gains on margins even as INR depreciated sharply over FY10-24



Source: Companies, Axis Capital

Exhibit 35: EBIT margins for Indian techs were back to 'similar or lower' than pre-Covid levels in FY23 after initial gains

EBIT margin	FY19	FY20	FY21	FY22	FY23	FY24
Infosys	22.8%	21.3%	24.5%	23.0%	21.1%	20.7%
TCS	25.6%	24.6%	25.9%	25.3%	24.1%	24.6%
Wipro	17.0%	18.1%	20.3%	17.5%	15.6%	16.1%
HCL Tech	19.6%	19.6%	21.3%	18.9%	18.2%	18.2%
TechM	15.0%	11.6%	14.2%	14.6%	11.4%	6.1%

Source: Companies, Axis Capital

We recognize that GenAI does provide Indian IT companies with a platform to pivot to a 'Services as a Software' model. However, the track record of the sector in passing on margin gains from currency depreciation or delivery-mix inspires little confidence in sustained margin gains for Indian tech. We will be tracking progress on this front closely to build conviction in this new service model.

Outlook 2025: Rate-of-Change excitement picking up from a year ago

We see growth returning to the sector after persistent underperformance in CY23 and early CY24. We see some rub-off from an increasingly optimistic macro-outlook, which is reflected in selective consensus growth upgrades for global techs. In contrast, Indian techs today trade at similar-to-higher multiples vs the past 3-5-year means. Global techs offer better risk-reward through a combination of lower-than-historical multiples and relative underperformance vs Indian techs.

Rate of change on the mend and better relative to CY24

Indian IT-services companies have been seeing a moderation in quarterly YoY growth between Q2FY23 and Q4FY24/Q1FY25. This moderation has been led by: (i) normalization of spends after the Covid-led upswing, due to pull-forward of spends in the post-pandemic world, (ii) mounting concerns of a macro slowdown led by geopolitical issues and high-inflation pressures, and (iii) election-related anxieties in major parts of the world in CY24, most importantly, in the US.

Exhibit 36: YoY cc growth continues to stabilize

Revenue growth YoY cc	Q3FY22	Q4FY22	Q1FY23	Q2FY23	Q3FY23	Q4FY23	Q1FY24	Q2FY24	Q3FY24	Q4FY24	Q1FY25	Q2FY25
TCS	15.5%	14.4%	15.5%	15.4%	13.5%	10.7%	7.1%	2.9%	1.8%	2.2%	4.5%	5.5%
Infosys	21.6%	20.6%	21.4%	18.8%	13.7%	8.8%	4.1%	2.4%	-1.0%	0.0%	2.6%	3.4%
Wipro*	28.4%	28.6%	17.2%	12.9%	10.2%	6.2%	1.1%	-4.8%	-7.0%	-6.6%	-4.9%	-2.4%
HCL Tech	14.9%	13.4%	15.6%	16.0%	13.2%	10.6%	6.3%	3.4%	4.4%	6.0%	5.7%	6.3%
Tech Mahindra	17.4%	22.8%	22.3%	17.4%	12.7%	7.0%	-0.9%	-6.0%	-5.2%	-6.2%	-1.4%	1.7%
LTIM	NA	29.9%	28.8%	22.9%	16.3%	13.5%	8.2%	4.5%	3.2%	1.2%	3.7%	4.3%
Mphasis	24.2%	26.8%	22.1%	16.9%	5.7%	-3.1%	-8.5%	-10.1%	-6.8%	-0.4%	3.1%	5.5%
Persistent	NA	NA	46.9%	43.0%	35.1%	27.9%	17.5%	13.8%	13.3%	13.2%	16.2%	18.3%
Coforge	37.2%	37.0%	24.3%	22.8%	21.1%	20.7%	18.4%	14.1%	12.0%	9.0%	7.8%	11.2%
Zensar	19.9%	28.5%	26.3%	14.4%	3.6%	-0.3%	-1.6%	-3.4%	-1.3%	0.2%	3.2%	3.3%
Firstsource	4.9%	3.1%	-2.7%	1.8%	-0.3%	-2.8%	-1.6%	-1.9%	2.7%	4.4%	14.6%	22.7%

Source: Companies, Axis Capital, *Note: IT services growth for Wipro

Exhibit 37: Tier-1 techs will see a recovery to high-single-digit growth in FY26E

YoY cc growth	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
TCS	7.1%	-0.8%	15.4%	13.7%	3.4%	5.7%	7.6%
Infosys	9.8%	5.0%	19.7%	15.4%	1.4%	5.5%	8.8%
HCL Tech	16.7%	1.1%	12.7%	13.7%	5.0%	-1.7%	9.1%
Wipro*	3.9%	-2.3%	27.0%	11.5%	-4.4%	5.4%	4.9%
Tech Mahindra	5.6%	-2.5%	16.7%	14.5%	-4.7%	1.3%	7.6%

Source: Companies, Axis Capital, *Note: IT services growth for Wipro

IT services stocks have continued to do well through CY24 YTD despite modest growth recovery through the year. This has lifted valuations to similar or higher than the Covid-highs in some cases led by sector rotation (with Indian IT having underperformed significantly compared to broader markets through FY22-24) and expected recovery in client spends. The pickup in client spends has failed to materialize in a significant manner through CY24/FY25, but we expect to see signs of improvement after two years of modest growth. This would be supported by increasing confidence in the US's economic strength, as inflation- and recession-related fears have receded. The impending change in the US administration supports this confidence, with expectations that the new government would be more pro-business, acting to ease regulations and push for rate cuts.

Exhibit 38: Indian IT services names have continued to do well through CY24 YTD

Stock price performance (%)	CY24 YTD	CY23	CY22	CY21	CY20	CY19	CY18
Nifty	13.2%	20.0%	4.3%	24.1%	14.9%	12.0%	3.2%
Nifty IT	26.3%	24.1%	-26.0%	59.6%	54.9%	8.4%	23.8%
Nasdaq	28.5%	53.8%	-33.0%	26.6%	47.6%	38.0%	-1.0%
S&P 500	27.7%	24.2%	-19.4%	26.9%	16.3%	28.9%	-6.2%
TCS	17.9%	16.5%	-12.9%	30.6%	32.4%	14.2%	40.2%
INFO	25.5%	2.3%	-20.1%	50.3%	71.8%	11.0%	26.5%
HCLT	30.2%	41.1%	-21.2%	39.4%	66.5%	17.8%	8.3%
WPRO	29.0%	20.0%	-45.1%	85.2%	57.1%	-0.9%	5.3%
TECHM	39.7%	25.2%	-43.2%	84.0%	27.7%	5.4%	43.5%
Mindtree			-28.2%	-24.8%	213.8%	89.1%	-29.9%
LTIM	1.5%	44.2%	-40.5%	100.4%	109.1%	1.1%	54.7%
MPHL	13.2%	38.9%	-41.9%	120.6%	67.0%	-9.4%	40.4%
COFORGE	42.1%	61.5%	-34.1%	117.7%	70.2%	38.3%	78.2%
PSYS	68.6%	90.9%	-21.1%	223.3%	125.0%	8.3%	-13.3%
LTTS	1.8%	42.7%	-34.2%	139.3%	59.3%	-14.0%	66.1%
TELX	-16.0%	39.3%	7.1%	219.7%	122.2%	-19.1%	NA

Source: Bloomberg, Axis Capital

The increased confidence in recovery in revenue growth through CY25/FY26 will be supported by potential improvement in spending after the lull through CY22-24. We would highlight that the commentary from both offshore IT services peers as well as global peers have been incrementally positive. Global peers like EPAM (not rated) and DAVA (not rated) highlight improved client conversations as well as client sentiment. Companies are no longer complaining of delayed or prolonged decision cycles, as was the case with them through most of CY23 and CY24 YTD. This is in line with our channel checks as well the commentary from Indian offshore vendors.

Exhibit 39: Global IT peers have highlighted positive change in demand sentiment in their recent results

Company name	Commentary
Globant	From a QoQ growth perspective, the company is experiencing initial signs of recovery in specific verticals that faced headwinds in the first half of the year.
	Leading indicators remain positive, reinforcing a strong end to the year and setting a solid start to 2025 with organic growth showing signs of improvement relative to 2024.
	The outlook for 2025 reflects the performance of some large deals that are ramping up, deals closing in the Middle East, strong performance in top accounts, as well as in Media and Entertainment.
	There is an acceleration in the number of deals that are AI-related or have AI components.
	Last year, clients were still exploring AI, analysing the technology, getting deep dives into it, and assessing its impact in many places. Now, there is more firm demand around AI, with visibility into larger projects.
	The company expects another quarter of net additions in Q4, with hiring in Latin America, India, and to a lesser extent, Europe. Faster net additions are expected in Q4 compared to Q3.
	The company is seeing a similar scenario to what has been observed over the last few quarters. However, conversations are improving in terms of revenue-oriented projects relative to efficiency or productivity projects.
	There is no deterioration in client budgets for CY25; it is unlikely that clients are targeting a lower number for CY25.
	The company is not seeing elongated closing cycles and is observing more stabilization on the macro level. Client demand is slightly better compared to the last 2-3 years.
EPAM	The company is seeing a more positive demand sentiment in both existing clients and newly acquired clients compared to 90 days ago.
	They remain optimistic about certain sectors of their target market and their broader portfolio, expecting to return to higher levels of growth over the coming quarters.
	However, there is still broad caution and some delayed decision-making, with a continued focus on cost optimization.
	Improvement is being seen in financial services, which showed up in Q3 results, and more progress is expected as they exit CY24.
	It feels that clients have reached a point where they need to make investments and are beginning to start spending again.
	Client conversations suggest a degree of stability, with discussions becoming incrementally more constructive.
	There may be some opportunity for modest price increases in CY25, but 2025 profitability may face pressure due to a disconnect between wage inflation and price increases.
	The company is looking to return to growth next year but is uncertain about the pace
	EPAM has raised its guidance for the first time in recent quarters, projecting revenues between USD 4,685 million and USD 4,695 million. The full-year GAAP diluted EPS is expected to be between USD 7.78 and USD 7.86, while the non-GAAP diluted EPS is anticipated to range from USD 10.73 to USD 10.81. This revised guidance reflects flat year-over-year growth at the midpoint
	The updated outlook includes an inorganic contribution of 240 bps, with 120 bps coming from the acquisition of NEORIS on November 1, 2024.
Endava	Endava highlighted that the market is showing signs of a significant digital shift. Traditional digital business is slowing down, while new growth, mainly driven by AI and core modernization, is accelerating.
	Over the past 20 years, digital capabilities were built around the periphery of client core systems. Now, AI needs to integrate into data and workflows, driving transformation at the core, leading to larger client programs
	The company raised its FY guidance with revenue expected in the band of GBP 800-810 million, representing an increase of 10-11.5% YoY cc.
	The guidance implies a 3.4-4% CQGR for the rest of the year, compared to the earlier 1.7-2.5% CQGR.
	Endava highlighted that ongoing client conversations about large transformative decisions provide confidence that these programs will ramp up over the next eight months.
	The pipeline continues to grow and is balanced across geographies and verticals.
	The largest client is now a GalaxE client, with expected stability. The next few clients are in payments, showing stability and some growth in one of them in the second half of the year.
	There is an increase in GenAI projects going into production, showing steady growth from a low base.

Source: Companies, Axis Capital

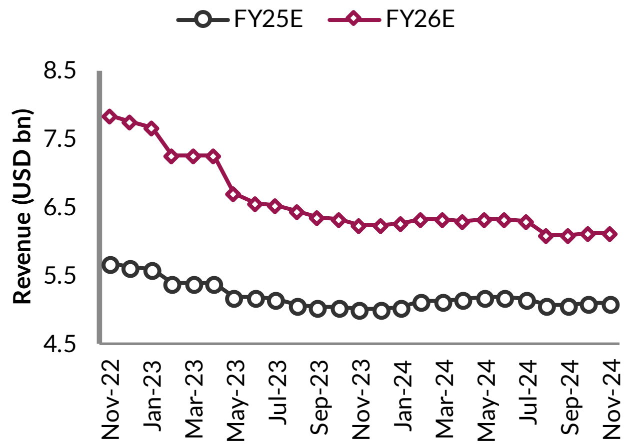
The anticipation of a pick-up in client spending on tech after recent quarter moderation is also echoed by the qualitative commentary from several global companies and their optimistic outlook in their respective revenue/EPS numbers (see Exhibit 39 for a glimpse of improving client spends across a list of US-listed companies). We note the recent outperformance among global tech companies and its impact on consensus growth upgrades (Exhibits 40) – coming on the heels of a long season of downgrades through most of CY23 and early CY24.

Exhibit 40: Q3CY24 marked a broad-based upward revision in estimates across a sample of US listed tech after a long time

Company Name	Market Cap (USD mn)	Revenue growth Revisions		Earnings Revisions		EV/ Revenues(x)		Price performance		
		CY24	CY25	CY24	CY25	CY24	CY25	1M	3M	CY24YTD
Palantir	1,51,184	1.7%	5.0%	6.7%	9.1%	52.3	41.9	58.4%	110.9%	286.7%
CrowdStrike	85,427	0.8%	0.0%	3.4%	2.4%	20.9	17.2	14.4%	25.1%	35.8%
Cloudflare	36,181	0.2%	-0.8%	4.8%	-1.3%	21.5	17.1	20.0%	27.9%	26.2%
DataDog	51,866	1.1%	0.7%	6.2%	5.5%	18.7	15.3	24.0%	31.5%	26.0%
Snowflake	56,916	2.0%	1.8%	17.2%	6.7%	15.4	12.5	49.3%	50.9%	-13.4%
Freshworks	5,025	0.7%	-2.0%	17.2%	27.8%	5.6	4.9	33.6%	37.8%	-31.5%
ServiceNow	2,15,977	0.7%	0.7%	1.0%	0.7%	19.4	16.1	11.1%	22.6%	48.4%
HubSpot	37,354	1.0%	0.5%	3.8%	2.3%	13.9	12.0	28.0%	45.0%	24.6%
Atlassian	69,273	0.2%	0.3%	0.7%	-0.5%	13.4	11.2	18.5%	60.6%	11.8%

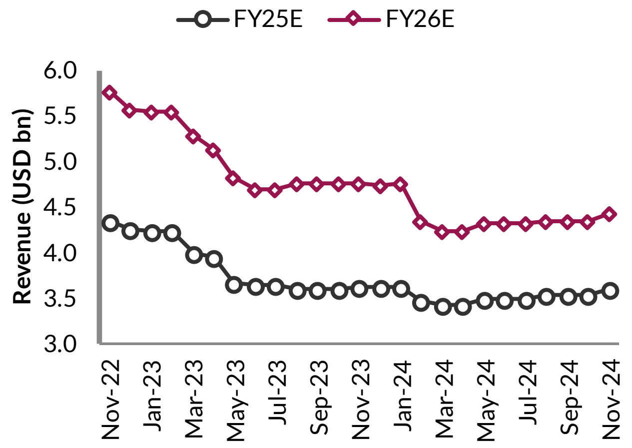
Source: Bloomberg, Axis Capital

Exhibit 41: Atlassian consensus revenue estimates changes



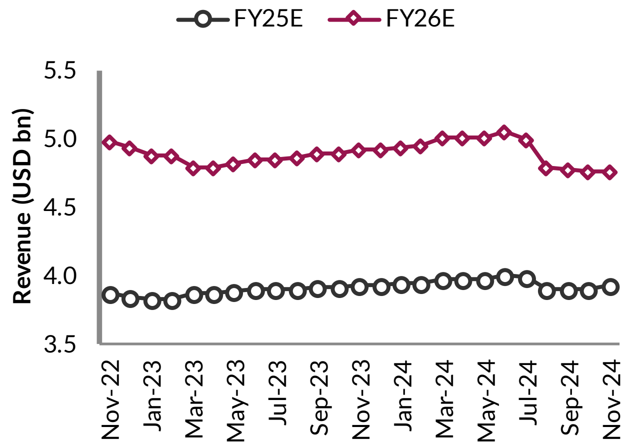
Source: Bloomberg, Axis Capital

Exhibit 42: Snowflake consensus revenue estimates changes



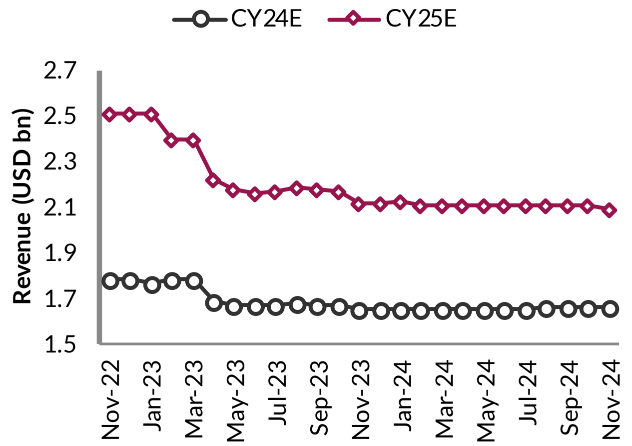
Source: Bloomberg, Axis Capital

Exhibit 43: CrowdStrike consensus revenue estimates changes



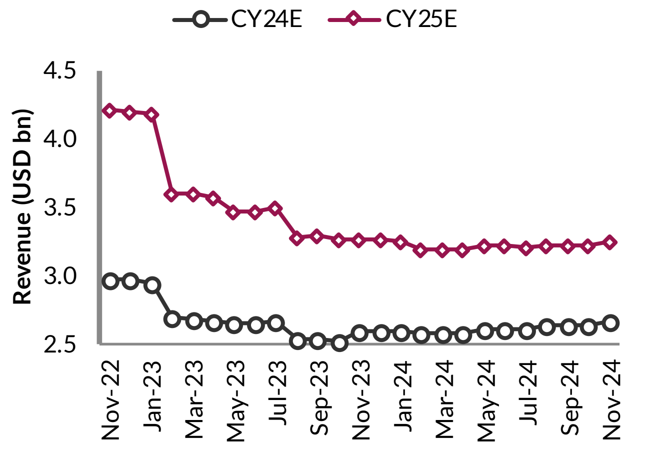
Source: Bloomberg, Axis Capital

Exhibit 44: Cloudflare consensus revenue estimates changes



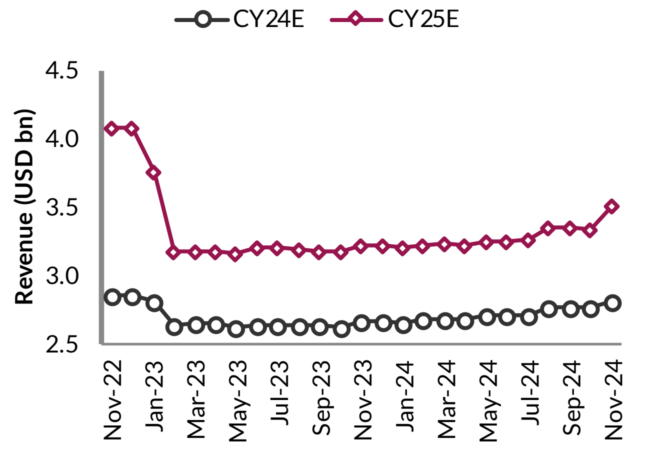
Source: Bloomberg, Axis Capital

Exhibit 45: Datadog consensus revenue estimates changes



Source: Bloomberg, Axis Capital

Exhibit 46: Palantir consensus revenue estimates changes



Source: Bloomberg, Axis Capital

Encouraging arithmetic

- The entry arithmetic for FY26E is better than that for FY25E. We draw attention to our analysis in Exhibit 47, which shows that the entry arithmetic for FY26E is better than FY25E for all the companies except for KPIT.
- The implied CQGRs for FY26E growth expectations are far more realistic vs those for FY25E at the start of the year. Exhibit 47 highlights that the implied CQGR for FY26E growth is broadly like the kind of growth the companies have achieved over FY18-25 as well as the pre-Covid timeframe of FY18-20.

Exhibit 47: Entry arithmetic for FY26E is better than FY25E for all the companies except for KPIT

Implied entry growth	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E
TCS	2.0%	2.6%	3.6%	-0.4%	6.3%	5.4%	2.6%	1.4%	2.5%
Infosys	0.8%	1.4%	3.9%	0.7%	5.1%	5.8%	-0.3%	-1.6%	2.6%
Wipro*	1.8%	1.3%	2.6%	1.5%	4.4%	5.7%	0.8%	-1.6%	0.8%
HCL Tech	5.0%	2.8%	6.0%	3.1%	4.7%	5.4%	2.4%	3.4%	3.3%
Tech Mahindra	4.5%	3.0%	2.2%	0.6%	2.6%	8.0%	1.0%	-0.7%	1.4%
LTIM		7.8%	5.0%	5.9%	6.5%	8.5%	2.8%	-0.2%	3.7%
Mphasis		6.0%	4.0%	3.9%	3.7%	8.7%	-4.2%	2.1%	3.7%
Persistent		-0.6%	-1.6%	1.3%	8.0%	10.6%	5.9%	4.9%	6.0%
Coforge		5.0%	4.8%	4.2%	7.4%	7.8%	6.9%	2.9%	5.9%
LTTS		11.5%	5.9%	0.2%	6.8%	6.2%	2.7%	5.0%	6.9%
Tata Elxsi					13.3%	10.5%	4.1%	1.8%	4.0%
KPIT						7.8%	17.4%	8.4%	4.1%
Firstsource		0.1%	1.4%	3.0%	15.0%	3.5%	1.5%	4.8%	7.5%

Source: Company, Axis Capital

Exhibit 48: Implied CQGR for FY26E growth appears more reasonable

Revenue CQGR (cc terms)	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25E	FY26E	Average of FY18-25	Average of FY18-20
TCS	1.7%	3.0%	0.7%	1.4%	3.4%	2.6%	0.6%	1.7%	1.9%	1.9%	1.8%
Infosys	1.6%	2.8%	1.6%	2.3%	4.8%	2.1%	0.0%	2.4%	2.0%	2.2%	1.8%
Wipro*	0.6%	1.6%	0.6%	0.1%	6.5%	1.5%	-1.7%	0.1%	1.6%	1.2%	1.0%
HCL Tech	2.0%	3.6%	3.3%	0.7%	3.2%	2.5%	1.5%	1.3%	2.2%	2.3%	3.2%
Tech Mahindra	1.4%	1.2%	1.0%	0.0%	5.3%	1.7%	-1.6%	0.8%	2.4%	1.2%	1.6%
LTIM	4.1%	4.2%	3.1%	1.3%	6.8%	3.3%	0.3%	2.6%	2.6%	3.2%	3.8%
Mphasis	4.1%	2.1%	2.6%	1.2%	6.2%	-0.8%	-0.1%	1.8%	2.6%	2.1%	3.0%
Persistent	1.8%	0.3%	1.8%	4.7%	8.0%	5.3%	3.1%	4.5%	3.8%	3.7%	1.3%
Coforge	2.8%	4.1%	3.3%	2.3%	5.4%	4.8%	2.2%	3.6%	3.7%	3.6%	3.4%
LTTS	6.6%	4.7%	0.8%	-0.2%	4.5%	2.8%	3.0%	2.4%	2.7%	3.1%	4.0%
Tata Elxsi	NA	NA	NA	NA	6.9%	4.1%	1.7%	2.2%	2.8%	3.7%	NA
KPIT	NA	NA	NA	NA	5.0%	10.4%	6.4%	3.5%	3.8%	6.3%	NA
Firstsource	0.1%	1.1%	2.1%	7.1%	0.7%	-0.9%	1.1%	5.9%	2.3%	2.2%	1.1%

Source: Company, Axis Capital

Lessons from end-CY16/early-CY17

A conflation of developments is shoring up optimism and expectations of higher tech spends potential reforms, a buoyant economy, and potential tax cuts by a new Republican administration in the US. This excitement is in stark contrast to when President Trump was elected for the first time in 2016 - when his platform had focused on tighter immigration and localizing manufacturing and business services. His win then had triggered a negative reaction for Indian techs in early Nov'16, they were already battling a lull in growth since FY15. By FY17, growth had fallen sharply.

Exhibit 49: Indian IT services stocks saw growth moderation through FY14-17

Revenue (USD mn)	FY12	FY13	FY14	FY15	FY16	FY17
Tier I Companies						
Infosys	6,994	7,398	8,249	8,711	9,501	10,208
TCS	10,171	11,569	13,443	15,454	16,544	17,575
Wipro	5,921	6,218	6,618	7,082	7,346	7,705
HCL Tech	4,152	4,685	5,360	5,952	6,389	6,976
TechM	1,157	2,633	3,098	3,663	4,038	4,351
Cognizant	6,121	7,347	8,843	10,263	12,416	13,487
Tier I Techs	**28,394**	**32,503**	**36,768**	**40,862**	**43,818**	**46,814**
Tier II companies	**FY12**	**FY13**	**FY14**	**FY15**	**FY16**	**FY17**
LTIM	403	436	1,132	1,331	1,525	1,667
Persistent	207	238	274	309	352	429
Coforge	330	380	384	388	411	415
Mphasis	1,116	1,011	1,006	946	927	905
Zensar	369	389	383	430	453	459
Cyient	324	345	363	447	472	538
Mindtree	403	436	502	584	715	780
Hexaware	308	364	388	422	485	526
LTI	0	0	630	747	810	887
Tier II techs	**2,425**	**2,454**	**3,178**	**3,404**	**3,669**	**3,876**
YoY growth %	**FY12**	**FY13**	**FY14**	**FY15**	**FY16**	**FY17**
Tier I companies						
Infosys	15.8%	5.8%	11.5%	5.6%	9.1%	7.4%
TCS	24.2%	13.7%	16.2%	15.0%	7.1%	6.2%
Wipro	13.4%	5.0%	6.4%	7.0%	3.7%	4.9%
HCL Tech	17.1%	12.9%	14.4%	11.1%	7.3%	9.2%
TechM	2.7%		17.7%	18.2%	10.2%	7.8%
Cognizant	33.3%	20.0%	20.4%	16.1%	21.0%	8.6%
Tier I techs	**17.7%**	**14.5%**	**13.1%**	**11.1%**	**7.2%**	**6.8%**
Tier II companies	**FY12**	**FY13**	**FY14**	**FY15**	**FY16**	**FY17**
LTIM						
Persistent	21.8%	14.7%	15.2%	12.6%	14.0%	22.0%
Coforge	21.1%	15.2%	0.9%	1.1%	6.0%	1.0%
Mphasis	1.5%	-9.4%	-0.5%	-6.0%	-2.0%	-2.4%
Zensar	47.4%	5.5%	-1.6%	12.4%	5.4%	1.3%
Hexaware	33.3%	18.3%	6.4%	8.9%	14.9%	8.3%
Tier II techs	**14.2%**	**1.2%**	**29.5%**	**7.1%**	**7.8%**	**5.6%**
				-4.1%	**0.6%**	**-1.2%**

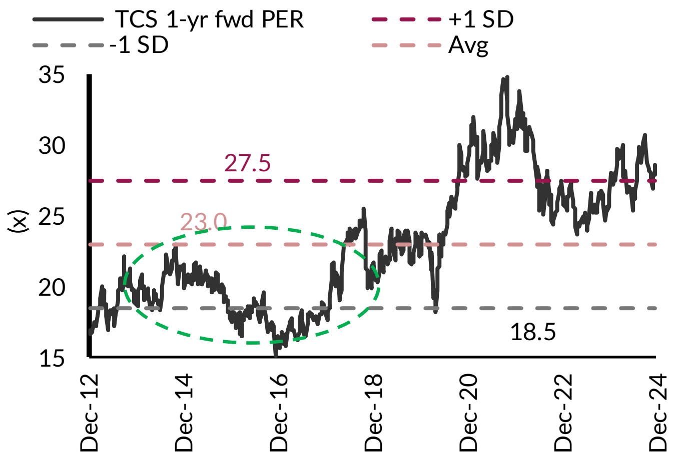
Source: Companies, Axis Capital

Exhibit 50: Indian IT stocks had delivered negative returns in CY16 with much sharper corrections seen for mid-tier

Stock price performance (%)	CY12	CY13	CY14	CY15	CY16	CY17
Nifty	27.7%	6.8%	31.4%	-4.1%	3.0%	28.6%
Nifty IT	-1.9%	58.0%	17.8%	0.0%	-7.3%	12.2%
Nasdaq	16.8%	35.0%	17.9%	8.4%	5.9%	31.5%
S&P 500	13.4%	29.6%	11.4%	-0.7%	9.5%	19.4%
TCS	8.2%	73.0%	17.8%	-4.7%	-2.9%	14.2%
INFO	-16.2%	50.3%	13.2%	12.1%	-8.6%	3.1%
HCLT	59.5%	104.1%	26.5%	7.1%	-3.2%	7.6%
WPRO	-1.1%	58.9%	-0.7%	0.8%	-15.3%	32.5%
TECHM	62.5%	97.1%	41.1%	-19.5%	-6.3%	3.1%
Mindtree	84.3%	93.9%	28.5%	-36.3%	-3.6%	123.2%
LTIM	NA	NA	NA	NA	NA	64.5%
MPHL	27.8%	14.5%	-12.4%	29.1%	13.6%	28.4%
COFORGE	31.6%	49.0%	2.7%	56.4%	-26.7%	51.9%
PSYS	55.9%	90.9%	70.1%	-22.9%	-3.9%	16.5%
LTTS	NA	NA	NA	NA	NA	30.5%

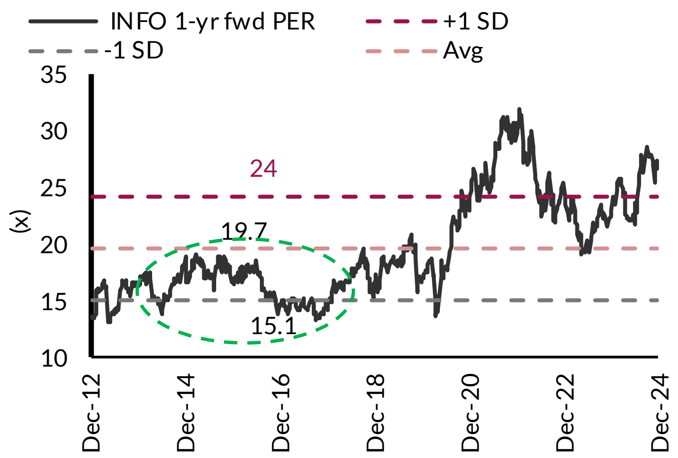
Source: Bloomberg, Axis Capital

Exhibit 51: TCS went through de-rating through FY15-17…



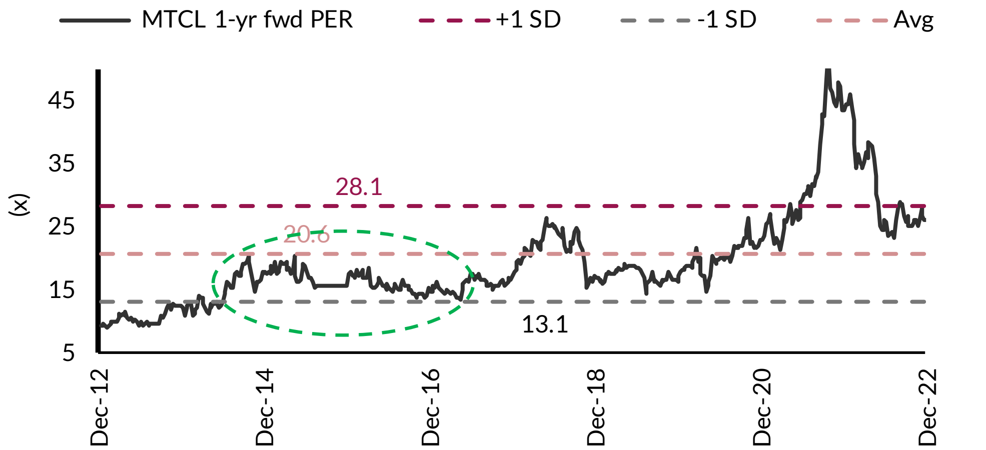
Source: Bloomberg, Axis Capital

Exhibit 52: …and so did Infosys



Source: Bloomberg, Axis Capital

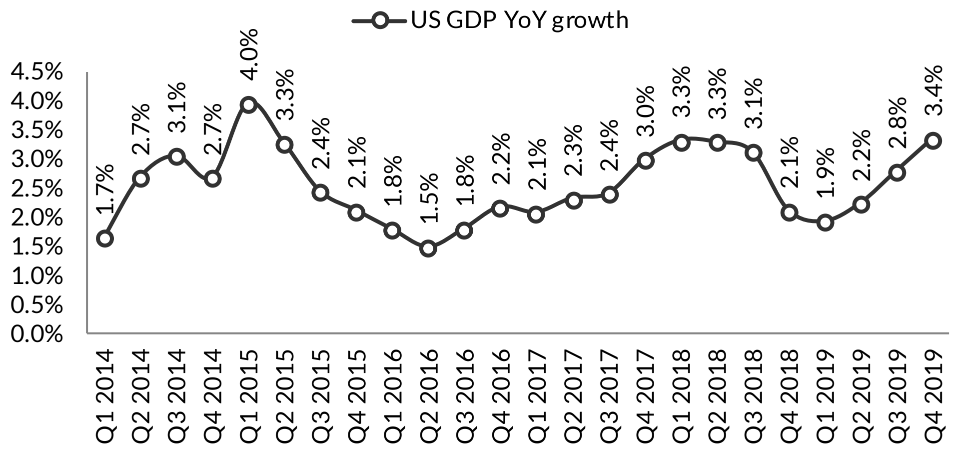
Exhibit 53: …as well as for Tier-2 techs like Mindtree



Source: Bloomberg, Axis Capital

CY17 saw a pickup in IT spending, supported by improving US GDP growth, with gains further accentuated by the 2017 Tax Cuts and Jobs Act that lowered both individual income tax as well as corporate taxes in addition to moving the US to a territorial system of business taxation. This drove recovery in revenue growth for Indian techs, with Tier-2 techs seeing a sharp boost on revenue growth through FY18 and which translated into sharp price performance through CY17. Strong stock performance continued through CY18/FY19 even as Tier-1 techs caught up with Tier-2 techs. We highlight that the strong price performance for Indian IT through FY17-19 was aided by a combination of a more favorable starting point (Indian IT stocks had a difficult CY16) and an improvement in revenue growth through FY17-19.

Exhibit 54: US GDP growth picked up through CY17 and CY18



Source: Refinitiv, Axis Capital

Exhibit 55: Indian IT services saw growth recovery through FY17-19…

YoY Revenue growth (%)	Sep'15	Dec'15	Mar'16	June'16	Sep'16	Dec'16	Mar'17	June'17	Sep'17	Dec'17	Mar'18	June'18	Sep'18
Infosys	8.7%	8.5%	13.3%	10.9%	8.2%	6.0%	5.0%	6.0%	5.5%	8.0%	9.2%	6.8%	7.1%
TCS	5.8%	5.4%	7.9%	8.1%	5.2%	5.8%	5.8%	5.2%	8.3%	9.1%	11.7%	10.0%	10.0%
LTI	NA	NA	NA	10.8%	7.1%	8.9%	10.6%	12.2%	12.9%	19.7%	21.6%	23.4%	21.4%
Mindtree	22.6%	24.8%	32.3%	28.5%	7.0%	4.2%	0.0%	0.6%	6.8%	11.5%	15.6%	20.7%	19.5%

Source: Companies, Axis Capital

Exhibit 56: …Sequential growth rates improved through CY17 after a forgettable CY16

QoQ Revenue growth (%)	Sep'15	Dec'15	Mar'16	June'16	Sep'16	Dec'16	Mar'17	June'17	Sep'17	Dec'17	Mar'18	June'18	Sep'18
Infosys	6.0%	0.6%	1.6%	2.2%	3.4%	-1.4%	0.7%	3.2%	2.9%	1.0%	1.8%	0.9%	3.2%
TCS	3.0%	-0.3%	1.5%	3.7%	0.3%	0.3%	1.5%	3.1%	3.2%	1.0%	3.9%	1.6%	3.2%
LTI	7.3%	0.5%	2.1%	0.6%	3.7%	2.3%	3.7%	2.0%	4.4%	8.5%	5.3%	3.5%	2.7%
Mindtree	16.4%	2.3%	6.1%	1.7%	-3.0%	-0.4%	1.8%	2.3%	3.0%	3.9%	5.6%	6.8%	2.0%

Source: Companies, Axis Capital

Exhibit 57: Tier-2 techs were early to see growth recovery and hence outperformed sharply through CY17 and CY18

Stock price performance (%)	CY16	CY17	CY18
Nifty IT	-7.3%	12.2%	23.8%
TCS	-2.9%	14.2%	40.2%
INFO	-8.6%	3.1%	26.5%
HCLT	-3.2%	7.6%	8.3%
WPRO	-15.3%	32.5%	5.3%
TECHM	-6.3%	3.1%	43.5%
Mindtree	-3.6%	123.2%	-29.9%
LTIM	NA	64.5%	54.7%
MPHL	13.6%	28.4%	40.4%
COFORGE	-26.7%	51.9%	78.2%
PSYS	-3.9%	16.5%	-13.3%
LTTS	NA	30.5%	66.1%

Source: Bloomberg, Axis Capital

Similar set-up on growth moderation through FY23-25E, valuations differ

Indian IT services has seen a sharp growth moderation through FY23-25E, which looks like what transpired over FY15-17. Similarly, at that point of time, there were concerns about Indian IT's ability to pivot on digital, which required investments in capability/delivery and thereby some dilution in margins. At the current juncture, there remain concerns about how GenAI progress impacts Indian IT's operating model. We are seeing increasing instances of GenAI test cases moving to production with global enterprises slowly and steadily pivoting towards leveraging GenAI across business use-cases. We reckon that while this will follow its own adoption curve, as spending recovery supports an improvement in revenue growth for the sector through CY25.

Exhibit 58: Growth trajectory expected to improve ahead

YoY constant currency revenue growth (%)	Q2FY24	Q3FY24	Q4FY24	Q1FY25	Q2FY25	Q3FY25E	Q4FY25E	Q1FY26E	Q2FY26E
TCS	2.9%	1.8%	2.2%	4.5%	5.5%	6.0%	6.9%	6.5%	8.0%
Infosys	2.4%	-1.0%	0.0%	2.6%	3.4%	6.0%	10.0%	8.9%	8.8%
Wipro	-4.8%	-7.0%	-6.6%	-4.9%	-2.4%	-0.7%	0.6%	2.6%	4.1%
HCL Tech	3.4%	4.4%	6.0%	5.7%	6.3%	4.6%	5.3%	8.6%	9.5%
Tech Mahindra	-6.0%	-5.2%	-6.2%	-1.4%	1.7%	1.6%	3.4%	4.3%	6.6%

Source: Companies, Axis Capital

Revenue growth improvement appears likely in late FY26, but importantly, the valuation set-up provides little comfort. Indian techs have outperformed sharply through CY24 YTD in anticipation of demand improvement, with valuations across most names 'similar to higher' compared to the past three/five-year averages, even as growth recovery is unlikely to be as strong as over FY21-23 when the pandemic pulled forward significant tech spend.

Exhibit 59: Indian IT names continue to trade above their 3/5/10 year averages

Vs. average valuations (including Covid upswing)							
		3-year average		5-year average		10-year average	
	Current P/E	3Y avg. P/E	Premium/Discount	5Y avg. P/E	Premium/Discount	10Y avg. P/E	Premium/Discount
TCS	29.8	27.5	9%	27.4	9%	23.7	26%
Infosys	27.5	24.4	13%	24.0	15%	20.4	35%
HCLT	28.0	21.0	33%	19.4	44%	16.9	65%
Wipro	24.9	19.7	26%	19.6	27%	17.2	44%
TechM	29.9	21.0	42%	19.1	56%	16.6	80%
LTIM	34.0	30.3	12%	29.3	16.0%	NA	NA
Mphasis	31.0	25.8	20%	23.9	30.0%	19.2	61.7%
Coforge	47.4	30.4	56%	29.1	63.2%	21.1	124.7%
Persistent	60.2	37.8	59%	32.1	87.7%	23.6	155.5%
Zensar	24.2	20.0	21%	18.1	33.6%	14.7	64.8%
LTTS	46.8	49.0	-4%	37.5	25.0%	NA	NA
KPIT	49.3	57.4	-14%	56.6	-12.9%	NA	NA

Source: Bloomberg, Axis Capital

In our view, the valuation set-up appears more favorable for global tech services in contrast to the Indian offshore techs. Global techs trade at lower-than-historical averages in most cases (Exhibit 60) and are beginning to highlight improvement in near-term demand and therefore they are 'maintaining or raising' their respective growth outlooks. This marks an improvement compared to CY23 and CY24 YTD when most global peers have continued to sound cautious and have kept moderating their respective growth outlooks. Global techs offer a margin of safety in terms of (1) current valuation multiples being cheaper than their own historical averages and (2) significant underperformance relative to Indian techs both on YTD and one-year bases, with global companies trading at significant discount to Indian peers even as they are set to see an improving growth trajectory.

Exhibit 60: Most global peers are trading at a discount to their 3/5/10-year averages

Vs. average valuations (including Covid upswing)							
		3-year average		5-year average		10-year average	
	Current P/E	3Y avg. P/E	Premium/Discount	5Y avg. P/E	Premium/Discount	10Y avg. P/E	Premium/Discount
Accenture	27.7	25.9	6.7%	27.1	2.2%	23.9	15.6%
Capgemini	13.3	15.7	-15.1%	16.1	-17.6%	15.9	-16.5%
Cognizant	16.3	15.2	7.5%	16.0	2.1%	16.3	-0.1%
EPAM	22.0	26.8	-18.0%	34.9	-37.1%	29.7	-26.1%
Endava	17.4	26.5	-34.2%	34.4	-49.3%	33.8	-48.5%
Globant	32.3	32.9	-1.8%	42.8	-24.7%	36.0	-10.4%
Genpact	13.2	13.5	-2.3%	15.3	-13.7%	16.2	-18.5%

Source: Bloomberg, Axis Capital

Exhibit 61: Global techs are beginning to see price momentum in the past 1/3M

Global IT services	1M	3M	6M	1Y	CY24 YTD
Accenture	1.1%	5.2%	24.7%	6.6%	2.4%
Cognizant	0.4%	5.9%	22.3%	14.7%	6.8%
Capgemini	-1.3%	-11.3%	-18.0%	-16.7%	-15.2%
EPAM	5.9%	19.9%	39.7%	-7.9%	-16.9%
Globant	-1.6%	15.5%	47.7%	0.2%	-4.3%
Endava	13.4%	-1.4%	14.0%	-57.0%	-61.6%
Taskus Inc	-12.2%	37.2%	16.2%	33.9%	27.2%
Palantir Tech	24.1%	109.4%	210.9%	307.8%	322.0%
CrowdStrike Hldg	7.1%	43.4%	1.3%	45.8%	38.5%
Cloudflare Inc	24.8%	49.4%	61.0%	46.9%	36.8%
Datadog Inc	29.5%	49.7%	47.2%	41.6%	32.8%
Snowflake Inc	49.5%	64.4%	37.8%	-5.2%	-9.2%
Freshworks Inc	2.3%	45.6%	32.1%	-17.0%	-28.4%
ServiceNow Inc	11.1%	31.0%	60.3%	60.3%	58.6%
HubSpot Inc	12.3%	49.1%	23.6%	46.9%	27.0%
Atlassian Corp	14.9%	67.9%	67.2%	42.0%	14.8%

Source: Refinitiv, Axis Capital

Exhibit 62: Valuation snapshot

Stock	CMP	Reco	TP	EPS (Rs)			EPS CAGR (%)	P/E (x)			EV/E (x)			EV/S (x)		
	(Rs)		(Rs)	FY25E	FY26E	FY27E	FY24-27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E	FY25E	FY26E	FY27E
TCS	4,433	REDUCE	4,300	136.1	155.4	169.4	9.3%	32.6	28.5	26.2	22.9	20.2	18.7	6.0	5.5	5.0
Infosys	1,949	ADD	2,050	63.2	71.4	80.3	8.3%	30.8	27.3	24.3	19.3	16.9	15.1	4.6	4.1	3.7
HCLT	1,936	REDUCE	1,800	65.3	74.4	81.9	12.3%	29.6	26.0	23.6	18.8	16.4	14.9	4.1	3.7	3.4
Wipro	308	ADD	330	12.1	13.2	14.3	11.2%	25.5	23.3	21.5	16.1	14.4	13.0	3.2	2.9	2.6
TechM	1,764	ADD	1,920	51.1	66.7	87.2	36.1%	34.5	26.5	20.2	22.6	17.7	13.9	3.1	2.8	2.6
Tier 1 IT Mean							**15.4%**	**30.6**	**26.3**	**23.2**	**19.9**	**17.1**	**15.1**	**4.2**	**3.8**	**3.5**
Tier 1 IT Median							**11.2%**	**30.8**	**26.5**	**23.6**	**19.3**	**16.9**	**14.9**	**4.1**	**3.7**	**3.4**
LTIMindree	6,579	REDUCE	5,800	164.5	197.1	229.2	14.1%	40.0	33.4	28.7	28.1	23.4	20.1	5.0	4.3	3.9
Mphasis	3,182	REDUCE	2,850	92.7	108.0	125.7	15.1%	34.3	29.4	25.3	21.7	18.6	16.1	4.0	3.5	3.1
Persistent	6,345	SELL	3,880	87.5	109.3	130.4	22.5%	72.5	58.1	48.6	47.0	37.8	31.9	8.1	6.8	5.8
Coforge	9,009	SELL	6,700	148.8	202.5	236.0	22.1%	60.5	44.5	38.2	29.4	23.3	20.1	5.0	4.0	3.5
Zensar	803	ADD	740	28.2	31.6	36.0	7.3%	28.5	25.4	22.3	19.4	16.6	14.3	3.0	2.6	2.3
Tier 2 IT Mean							**16.2%**	**47.2**	**38.2**	**32.6**	**29.1**	**23.9**	**20.5**	**5.0**	**4.3**	**3.7**
Tier 2 IT Median							**15.1%**	**40.0**	**33.4**	**28.7**	**28.1**	**23.3**	**20.1**	**5.0**	**4.0**	**3.5**
LTTS	5,369	REDUCE	4,950	126.8	149.4	172.2	11.9%	42.3	35.9	31.2	27.7	23.1	20.2	5.2	4.5	4.0
Tata Elxsi	7,403	SELL	6,600	134.4	151.7	171.8	10.6%	55.1	48.8	43.1	39.9	34.5	30.2	11.4	9.9	8.7
KPIT	1,539	ADD	1,800	30.1	34.9	42.0	24.4%	51.1	44.1	36.7	32.4	27.4	22.7	6.9	5.8	4.8
Tata Tech	943	REDUCE	910	16.5	20.1	23.7	12.4%	57.1	47.0	39.7	37.8	32.1	27.4	6.9	6.0	5.2
ER&D Mean							**14.8%**	**51.4**	**44.0**	**37.7**	**34.5**	**29.3**	**25.1**	**7.6**	**6.5**	**5.7**
ER&D Median							**12.1%**	**53.1**	**45.5**	**38.2**	**35.1**	**29.8**	**25.0**	**6.9**	**5.9**	**5.0**
Firstsource	381	ADD	400	8.9	11.8	14.7	26.1%	43.0	32.4	26.0	22.2	18.0	15.2	3.4	2.9	2.5

Source: Bloomberg, Axis Capital

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ADD	Between 5% to 15%
REDUCE	Between 5% to -10 %
SELL	More than -10%

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