J.P.Morgan

India IT Services

2022 Outlook: DX megatrends & tech spending super-cycle extending growth durability and valuations

CY21 saw continued strong performance from Indian Techs, led by accelerating growth from the digital transformation wave resulting in 34% outperformance over NIFTY. We see seven themes driving CY22. A technology spending super-cycle led by DX megatrends should keep overall growth strong. The absence of mega deals drives headline TCV down, but the increase in small/medium-sized deals mean velocity of demand remains high. The success of WFA model and supply crunch means increased offshoring will remain. Net hiring should be considered the primary leading indicator of demand rather than TCV in order to gauge medium-term demand strength. Increased supply costs are the biggest headwind to margins, but we see levers from operating leverage, higher offshoring and pyramid flattening. We stay constructive on Indian IT Services, and prefer large caps (Infosys & TechM top OWs) and Mphasis (our only mid-cap OW).

- **DX megatrends drive strong tech spend super-cycle.** Digital transformation (DX) megatrends remain strong across Experience, Data and Cloud. We expect this wave to continue to remain strong as DX is a multi-year journey, thereby providing visibility on medium-term growth.
- **ER&D seeing significant traction.** ER&D is seeing a shift towards digital engineering as enterprises shift from delivering products to delivering experience. The need for faster go-to-market as well as a shortage of talent in client geos is leading to increased outsourcing, which is a positive for Indian IT.
- **Increased offshoring here to stay.** The success of the 'work from anywhere' model, along with the supply crunch seen in the current strong demand environment where there is a war for talent, means increased offshoring remains.
- **Deal velocity high as ACV/TCV ratio falling.** Large transformation projects are being broken down into multiple smaller shorter duration projects in order to drive faster transformation. This will result in lower TCV but higher ACV, thereby driving faster revenue conversion.
- **Hiring is the new leading indicator.** With limited near-term predictive power in reported deal signings, net hiring should be considered the primary leading indicator of demand rather than TCV.
- **Margin levers – offshoring, pyramid flattening, operating leverage.** The biggest headwind to margins is higher supply costs, and the biggest margin lever is operating leverage. Apart from that, the other two levers are increased offshoring and flattening of the employee pyramid through fresher hiring.
- **M&A could be a source of differentiation.** Strategic M&A has helped Wipro/TechM accelerate over peers (TCS/HCL) in FY22 and if executed well will remain a differentiation driver, particularly into Experience/SaaS/Cyber.
- **Growth upside supports valuations, INFO, MPHL, TECHM top picks.** Reverse DCFs reveal that scale providers price in 10-14% 5-yr revenue growth and midsized ones price in 16-20% 5-yr CAGR. We see more value in scale providers that have upside to FY23/24 growth expectations and downside risks to midsized firms except Mphasis (OW). We think scale firm growth upside supports current +2/3SD valuations, while midcap valuations appear more stretched. Top OWs: Infosys, TechM and Mphasis. Overall pecking order: INFO > MPHL > TECHM > TCS > HCLT among OWs.

Technology, Internet & Telecoms

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Summary recommendations

Company	Rec	PT	TSR
TCS	OW	4,400	16%
Infosys	OW	2,250	24%
Wipro	N	690	-2%
HCL	OW	1,400	10%
TechM	OW	2,000	17%
LTI	UW	6,500	-10%
Mphasis	OW	4,000	22%
Mindtree	UW	4,200	-10%

Source: J.P. Morgan estimates. TSR: Total stock return potential. Priced as of 5 January 2022.

See page 16 for analyst certification and important disclosures, including non-US analyst disclosures.

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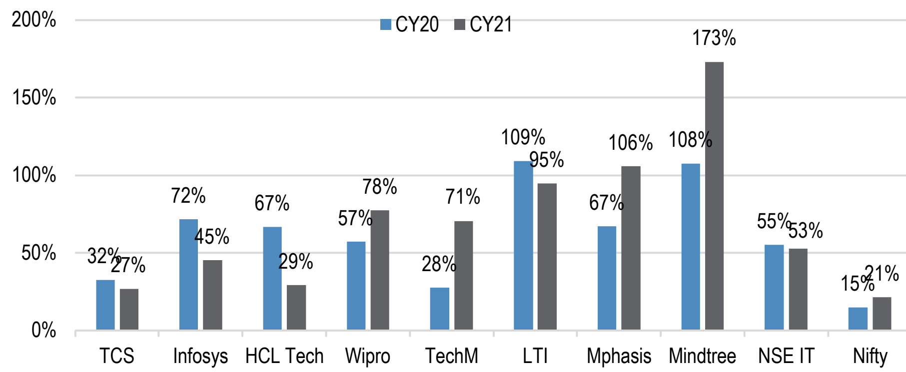
2021 in retrospect

CY21 saw the Indian IT sector outperform the Nifty handsomely, led by strong revenue growth and better-than-expected margin management, despite rising attrition. The Nifty IT index was up 53% in CY21, >2x the performance of the Nifty which was up 21%. Midcap IT stocks outperformed large caps, led by faster growth and better ability to pass on cost inflation to clients. Amongst the large caps, Wipro and TechM were the standouts.

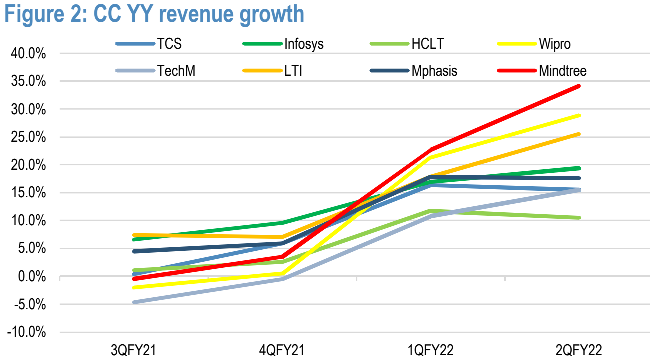
Figure 1: IT stocks performance CY21 vs CY20



Source: Bloomberg Finance L.P.

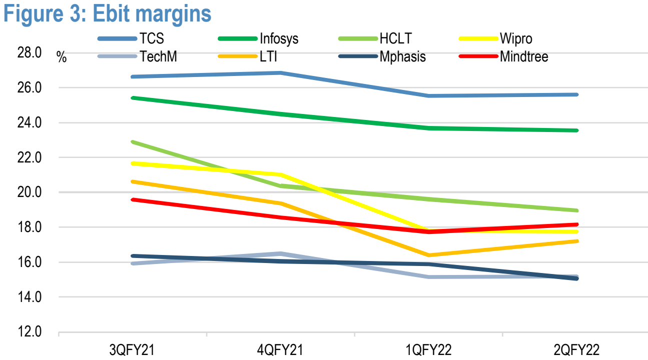
The continued strength of the demand environment led to an acceleration in CC YY growth across IT companies in CY21 with decade-high growth seen in several companies. However, there was a demand-supply mismatch, leading to higher attrition which in turn drove increased hiring, retention and subcontracting costs, all of which impacted margins.

Figure 2: CC YY revenue growth



Source: Company, J.P. Morgan

Figure 3: Ebit margins



Source: Company, J.P. Morgan

The demand environment remains very strong, while large transformation projects are being broken down into multiple smaller shorter duration projects in order to drive faster transformation. This is driving headline TCVs down on the increase in smaller deal sizes, even as velocity of demand stays high.

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DX wave continues and remains strong

The digital transformation (DX) wave which was kick started or accelerated in 2020 led by Covid continues and remains strong. DX for enterprises on both IT and operations is likely to be a multi-year journey. COVID-19 has accelerated the DX journey for early adopters and jump-started the journey for laggards. Indian IT firms are likely to enjoy in higher tech spending over the next couple of years.

We see DX across three main components – CX (front end), Data (middle office/processes) and Cloud (back-end). We see this further broken into 12 major sub-components.

Figure 4: Digital transformation

Digital Transformation

Customer Experience	Data	Cloud: Applications	Cloud: Infrastructure
Front Office	*Middle office/Processes*	*Back office/Technology Core*	*Back office/Technology Core*
UI/UX, Design, Marketing	Automation, Analytics, AI	Legacy modernization, SaaS implementation, Cloud native development	Hybrid Cloud migration, Cloud service brokerage, Cybersecurity
•Designing user interfaces including applications, processes and customer journeys for enterprises' customer facing apps/processes •Digital Marketing, campaign design	•Implementing Automation platforms, automating processes •Digitising worklows, labeling data architecture •Analytics and insights for business information •AI led projects •Managing data architecture across enterprise clouds	•Replatforming from Mainframes to Cloud based architectures •Implementing SaaS platforms •Writing new applications on public/private cloud platforms	•Migrating workloads and data to Public/private cloud •Managing workloads across different cloud platforms •Managing cloud security threats

Source: J.P. Morgan

Hybrid multi-cloud – biggest megatrend

Cloud is a key enabler for DX projects across enterprises. A hybrid multi-cloud architecture is increasingly seen as the default for cost efficiency, agility, resilience and scalability. Migration to cloud is emerging as the key priority amongst clients. Acceleration to the cloud has gathered pace as enterprises realized the benefits from movement to public or hybrid clouds.

Gartner estimates public cloud spending to increase 2.7x to US$850bn by 2025 with its share in IT services spend rising to 51% from 30% in 2020. The cloud migration journey has just begun with less than 30% of workloads moved to the cloud currently and hence the opportunity appears very large over a multi-year period.

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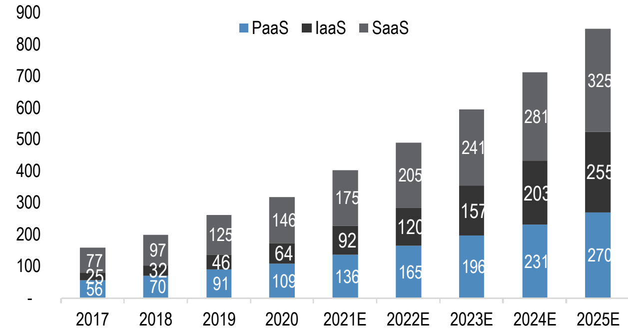
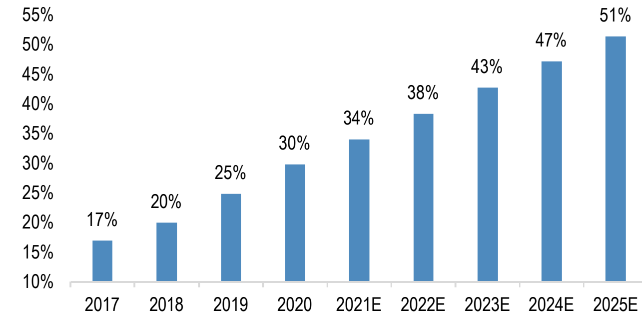
Figure 5: Breakdown of public cloud spending (US$bn)



Source: Gartner

Figure 6: Overall cloud spending as a % of IT spend is rising rapidly



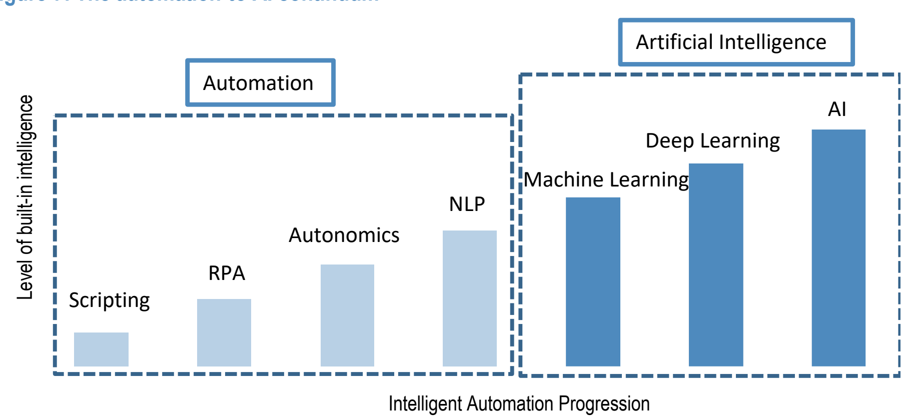
Source: Gartner

IT services firms play an end-to-end role in the clients' cloud migration journey, from consulting them on selection of cloud provider to implementing the migration and finally providing maintenance services post migration.

Data – driving Automation, Analytics, AI

Analytics has always been important for enterprises. Sources of data available across enterprises are rising. The need to manage multiple sources of data across the enterprise for better business insights has driven up the usage of data management, analytics and AI. The need for increased responsiveness, better insights and a reduction of manual intensity of processes in the middle office is driving up the need for better data and analytics. AI remains a key general purpose technology that is being leveraged with greater contextual knowledge by IT Services firms.

Figure 7: The automation-to-AI continuum



Source: Avasant, J.P. Morgan

Customer Experience – at the forefront of focus

Enterprises have been increasing investments in enhancing customer experience for two reasons: 1) to retain existing customers and add new customers by providing better overall experience and 2) to differentiate themselves compared to competitors. Both these are important in order to increase sales and drive customer loyalty for enterprises.

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Industry outlook strong

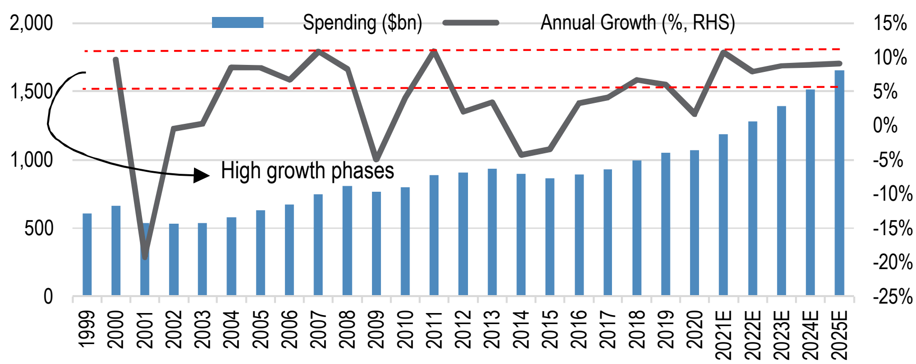
DX is driving a strong demand outlook for the IT industry, which we believe can sustain at least for the next three years. The confidence stems from the fact that the transformation programs at enterprises are large and complex, and hence have to be executed over multiple years.

The large transformation projects are being broken down into multiple smaller, shorter duration projects in order to drive faster transformation. This is driving headline TCVs down on the increase in smaller deal sizes even as the velocity of demand stays high.

Gartner estimates global IT services spending to record a 9.1% CAGR over 2020-25, which is the strongest sustained growth rate since the 2003-07 period 18 years ago. This, we believe, will be driven by increased digital transformation spending in the areas of cloud, data, analytics and AI.

Gartner estimates global IT services spending to grow 9.1% CAGR over 2020-25 – the strongest sustained growth rate since the 2003-07 period 18 years ago

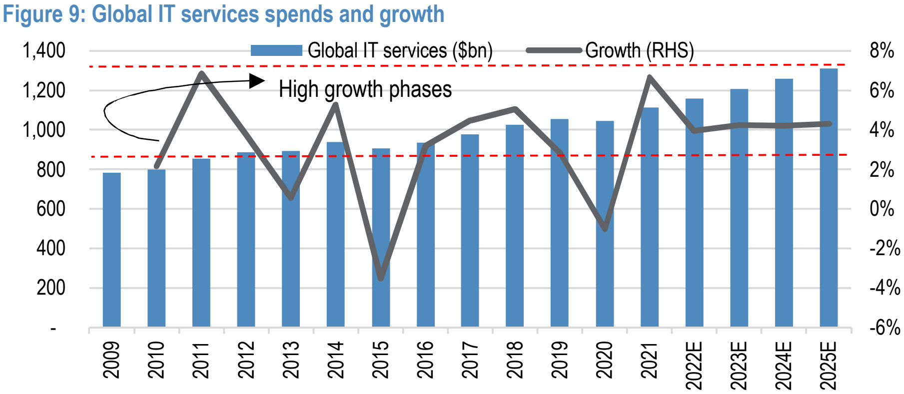
Figure 8: Global IT services spends and growth



Source: Gartner

IDC expects global IT services spending to accelerate back towards mid-single digits over 2020-2024 – in the relative high growth phase for the overall industry

Figure 9: Global IT services spends and growth



Source: IDC

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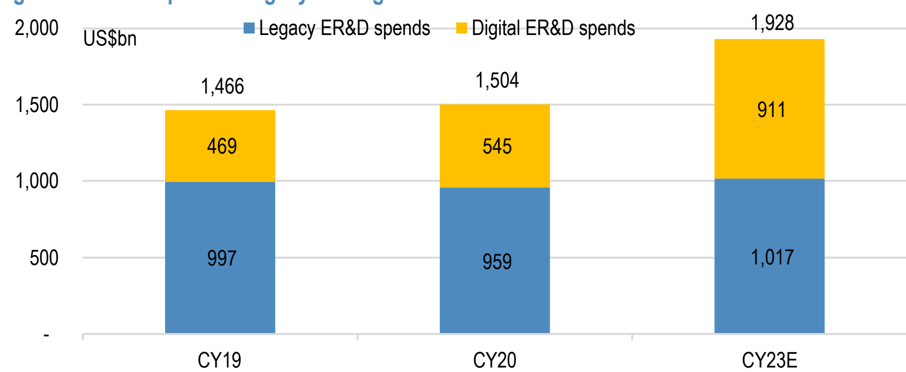
ER&D – seeing significant traction

ER&D (Engineering Research & Development) services are witnessing a shift towards digital engineering from traditional mechanical and embedded areas as enterprises shift from delivering products to delivering services or experience to end customers. The pivot towards digital across industries is visible across verticals with demand fueled by new technologies across electric, connected and autonomous vehicles, smart factories/digital manufacturing, Industry 4.0, connected devices, remote healthcare, and sustainable engineering.

Client geographies face shortages of talent required for digital engineering projects. This is leading to increased outsourcing as offshore vendors are better placed to acquire talent than enterprises. India-based vendors are well positioned to benefit from this opportunity.

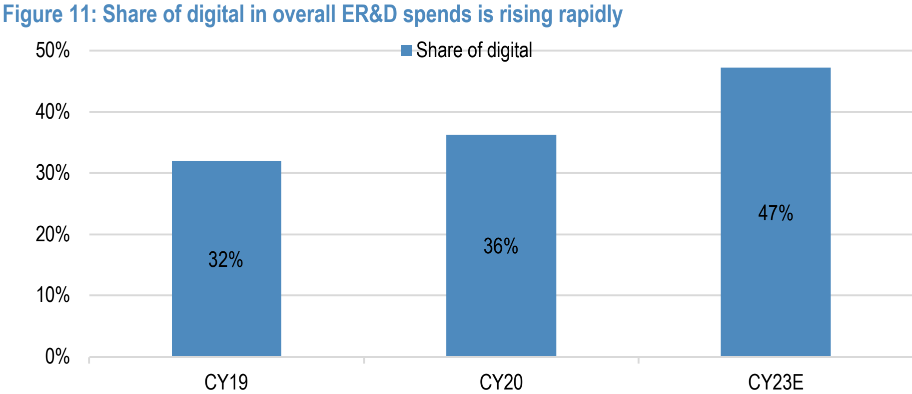
Zinnov, an industry analyst, estimates overall ER&D spending to see a 9% CAGR over CY20-23E to reach US$1.9tn, led by a strong 19% CAGR in digital ER&D spending with legacy ER&D spending growing at only 2%. This translates to an increase in the share of digital ER&D from 36% in CY20 to 47% by CY23E.

Figure 10: ER&D spends – legacy and digital



Source: Zinnov

Figure 11: Share of digital in overall ER&D spends is rising rapidly



Source: Zinnov

Offshoring on the rise and here to stay

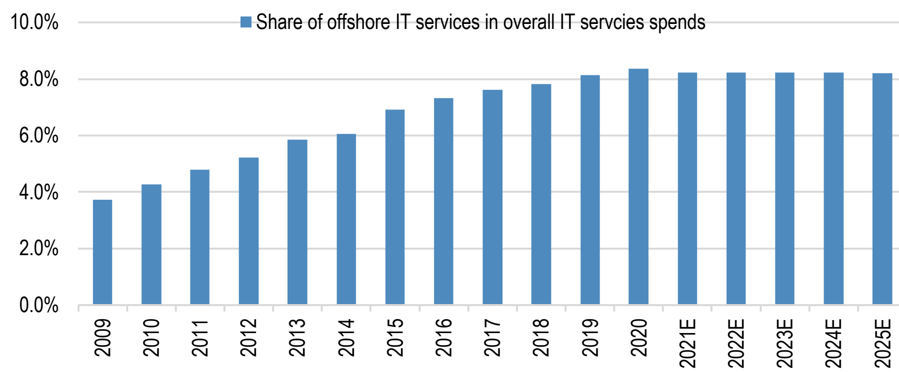
The success of the 'work from anywhere' model over the last two years has led to increased offshoring. This has also been helped by the supply crunch seen in the current strong demand environment, where there is a war for talent. India is well placed to meet this demand supply gap given the high number of engineers it churns out every year.

Clients are now not concerned about the locations from where the work is being done as long as they are getting the desired output. Higher offshoring also helps clients save costs as rate cards in an offshore contract are ~1/3rd the onsite rates.

We believe offshoring is here to stay even after travel resumes due to the success of the 'work from anywhere' model.

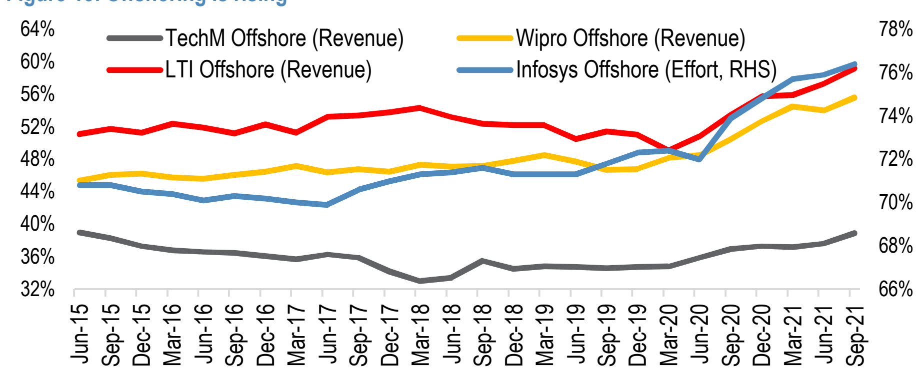
IDC expects the share of offshore IT services spending to remain stable at ~8% over 2020-25E

Figure 12: Offshore IT services spends and growth



Source: IDC

Figure 13: Offshoring is rising



Source: Company, J.P. Morgan

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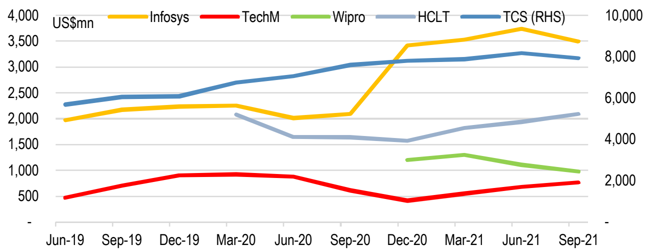
Deal velocity high as ACV/TCV ratio falling

The industry hasn't seen any mega deals over the last year as the deal mix has shifted towards small, medium and large deals. The absence of mega deals has driven headline TCV down but the increase in small- and medium-sized deals mean velocity of demand remains high.

The absence of mega deals is explained by the fact that while the underlying digital programs are large and complex, contracting signing is piecemeal as clients accelerate small transformation projects. The large transformation projects are being broken down into multiple smaller, shorter-duration projects in order to drive faster transformation.

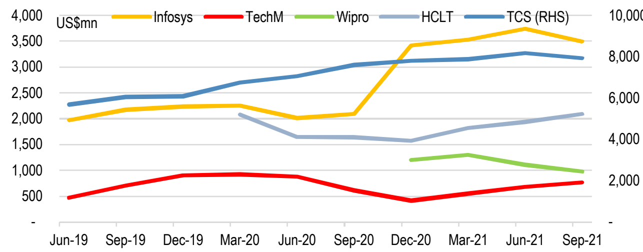
The shorter duration deals means though the TCV is lower but ACV is higher driving faster revenue conversion which should reflect in stronger growth. We believe midcap IT companies (and IT insurgents – LTI, Mindtree and Mphasis) benefit more from shorter duration contracting with better win rates on such deals and better ability to pass on cost inflation for such projects onto clients to protect margins.

Figure 14: Deal TCVs – large cap IT – rolling 4 quarters



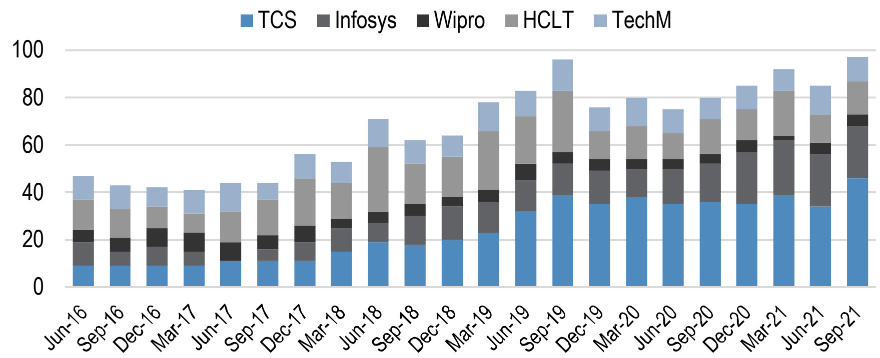
Source: Company, J.P. Morgan; For Infosys, TCV is total large deal wins (>$50 mn); for TCS, its total deal wins; for Wipro this are deals above >$30m in TCV; for HCLT and TechM, the figure includes only net new deal wins

Figure 15: Deal TCV – midcap IT – rolling 4 quarters



Source: Company, J.P. Morgan; For Mphasis the figure includes only net new deal wins in its Direct business; for Mindtree its total deal wins

Figure 16: Number of large deals

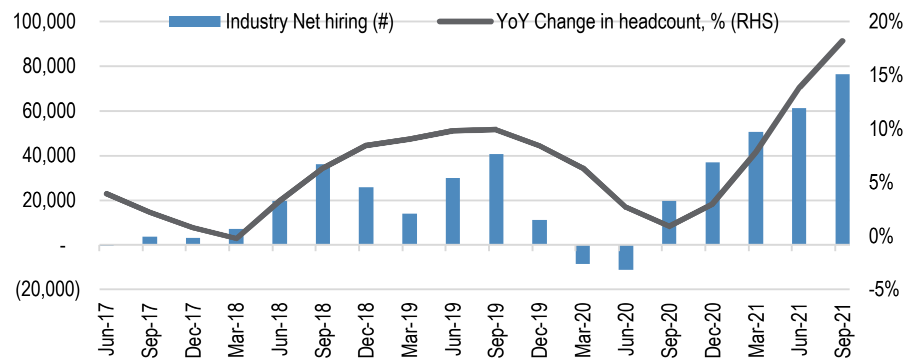


Source: Company, J.P. Morgan

Hiring – new leading indicator

With limited near-term predictive power in reported deal signings, net hiring should be considered as the primary leading indicator of demand rather than TCV. Moderating TCV from lower duration deals means its utility for predicting revenue growth rates has become limited. Net hiring, on the other hand, becomes a more useful leading indicator in a supply-constrained market and showcases the strength of the demand the companies see over medium term.

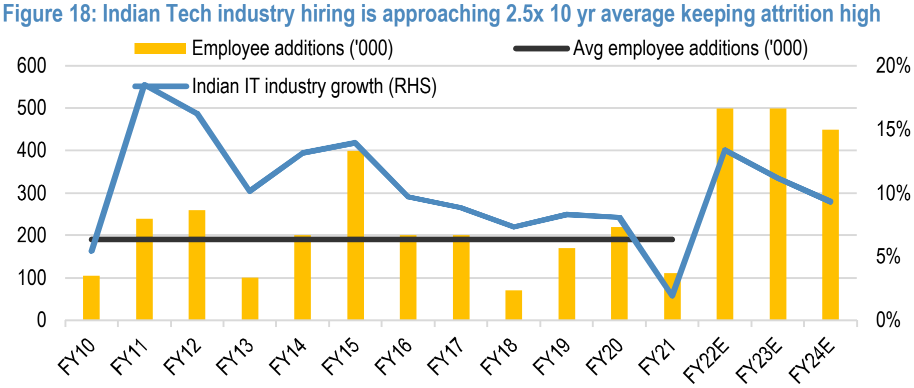
Figure 17: Industry net hiring



Source: Company, J.P. Morgan; Note: Industry includes TCS, Infosys, HCLT, Wipro, TechM, LTI, Mphasis and Mindtree

Industry net hiring growth has been accelerating over the last four quarters on the back of a strong demand environment, high attrition and razor-thin benches. Hiring at many companies was stronger than revenue growth to plan for future pipelines and high attrition. The Indian IT industry has been hiring c.200K net staff over the last decade and the spurt in growth in FY22 is likely to push the industry to intake ~2x or 400K. We anticipate strong industry growth over the next three years would imply graduate intake is likely to stay elevated at 350-400K. While India produced ~820K engineers in 2020 (per Ministry of Human Resource and Development), the extent of penetration will have to be dramatically expanded. We expect the high attrition to sustain over the next -18 months given the continued demand-supply imbalance.

Figure 18: Indian Tech industry hiring is approaching 2.5x 10 yr average keeping attrition high



Source: J.P. Morgan estimates, NASSCOM

Graduate hiring helps companies in two ways: 1) easier availability and ability to deploy across technology stacks, and 2) optimizing staff cost lines by flattening the overall employee pyramid.

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Margin levers – offshoring, pyramid flattening & operating leverage

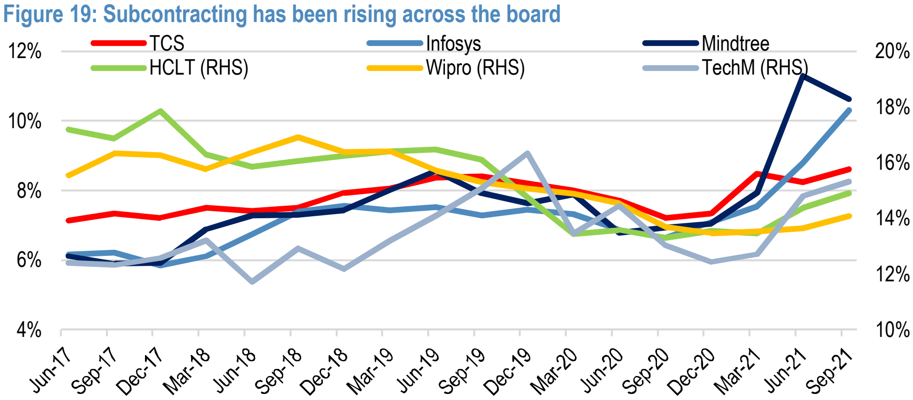
The biggest headwind to margins remains higher supply costs from increased attrition, hiring, retention and subcontractor costs. The war for talent has pushed up hiring and retention costs significantly, while the demand supply gap means increased use of subcontractors, which come at higher costs.

Hiring costs have been inflated across salaries and bonuses across the board given the continued supply crunch. The onsite supply crunch continues to drive subcontracting to fulfill demand. Companies don't foresee supply challenges moderating in the near term as they don't want to lose out on demand. This is expected to moderate once graduates hired over 1HFY22 are inducted into projects post their training.

We believe the biggest margin lever is operating leverage from strong revenue growth. Apart from that, the other two levers to offset the headwinds from supply costs are increased offshoring and flattening of the employee pyramid through fresher hiring.

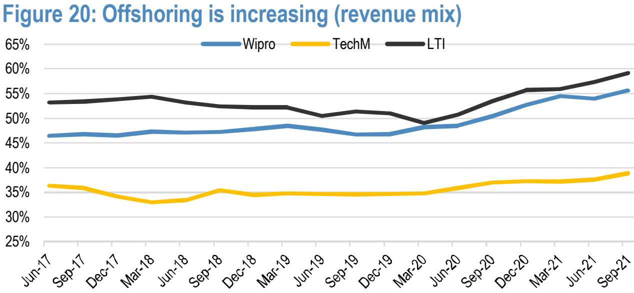
Pricing could also turn out to be another lever to manage margins. Companies are trying to pass on higher supply costs to clients in pockets if not everywhere. This is happening both in cases of new engagements as well as when contracts come up for renewals that can drive an upward bias in pricing.

Figure 19: Subcontracting has been rising across the board



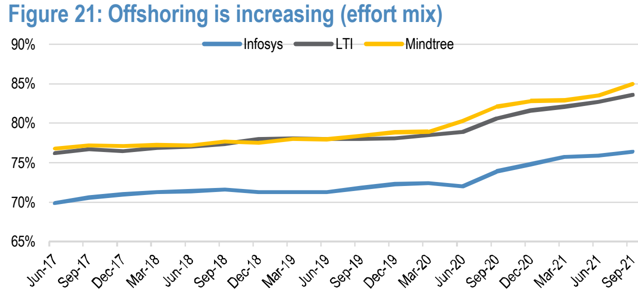
Source: Company, J.P. Morgan

Figure 20: Offshoring is increasing (revenue mix)



Source: Company, J.P. Morgan

Figure 21: Offshoring is increasing (effort mix)



Source: Company, J.P. Morgan

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M&A – tuck-ins continue

M&A has been relatively sparse across most Indian Techs with most largely tuck-in acquisitions to acquire capability or build scale in new areas of DX such as analytics, cybersecurity, digital engineering, Saas implementation

Wipro and TechM have been the most active on both value and volume of acquisitions completed across Indian Techs. Wipro spent the most across Indian Techs with $1.8bn on M&A in CY21 across four acquisitions. M&A continues to be an integral part of Wipro's business strategy in order to augment, scale up and shift positions across BFSI, cybersecurity and specific end-markets.

TechM's M&A strategy appears more non-conventional with $415m spent across nine assets. It appears to have a clear programmatic or high velocity approach to acquiring companies with specific themes around building new capabilities, discipline on financial metrics and overall alignment in areas of cloud, automation, customer experience and digital engineering. This can tailor acquisitions to its specific needs – similar to global peer Accenture's successful approach.

Both Wipro and TechM have witnessed growth acceleration and beaten/caught up with peers HCL/TCS on growth. Successful M&A remains an important strategic tool that Indian Techs ought to use and can drive differentiated outcomes.

Table 1: M&A in 2021

Date	Company	Target company	Deal value ($mn)	Details
Dec-21	Wipro	Edgile	230	Information security consulting firm focused on delivering cybersecurity and risk management consulting services
Dec-21	Wipro	LeanSwift	21	LeanSwift is an Infor Alliance Partner and a system integrator of Infor Products
Dec-21	TechM	Project Activus	62	Remote customer experience and customer care solutions provider
Oct-21	TechM	We Make Websites	13	Website building and migration services on the Shopify Plus platform.
Oct-21	TechM	Infostar LLC	105	Digital engineering quality assurance provider for new age digital companies.
Oct-21	TechM	Beris Consulting	8	IT consultancy service provider with expertise in the automotive industry in Germany with experience in areas of CX, Aftermarket, Mobility and sharing
Sep-21	Mphasis	Blink Interactive	94	Design consultancy services around user experience and customer experience
Jun-21	TechM	Brainscale	29	Cloud focused company having expertise in cloud consulting, enablement, application development and data analytics
Jun-21	LTI	Cuelogic	8	Digital engineering company
May-21	Mindtree	NxT Digital	27	Cloud based IoT and AI platform
Apr-21	TechM	Eventus Solutions	44	It provides cloud and automation services, managed services and strategy consulting
Apr-21	TechM	DigitalOnUs	120	It provides cloud native development and hybrid cloud automation services
Apr-21	Wipro	Ampion	117	Provider of cyber security, DevOps and quality engineering services in Australia
Mar-21	TechM	Perigord asset holdings	25	It provides end-to-end packaging supply chain solutions to the Life Science industry
Mar-21	Wipro	Capco	1,450	Global management and technology consultancy to banking and financial services industry
Jan-21	TechM	Payments Technology	9	It is a payments solutions provider with a focus on BFS vertical. TechM will get access to IPs and licenses for 2 products

Source: Company, J.P. Morgan

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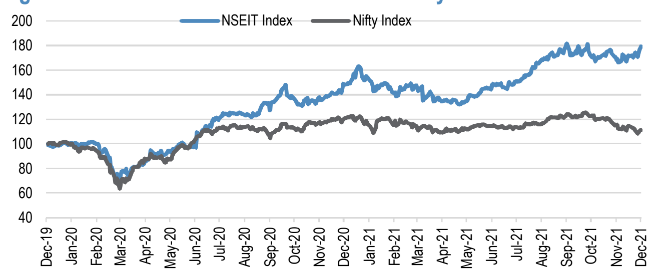
Valuations – reasonable

NSE IT has outperformed Nifty by 34% over the last year led by a 55% premium in P/E multiples. The sector has re-rated to +2.5SD of its three-year average from +2SD last year. The outperformance has been led by an acceleration in revenue growth and increased confidence in the medium-term demand outlook.

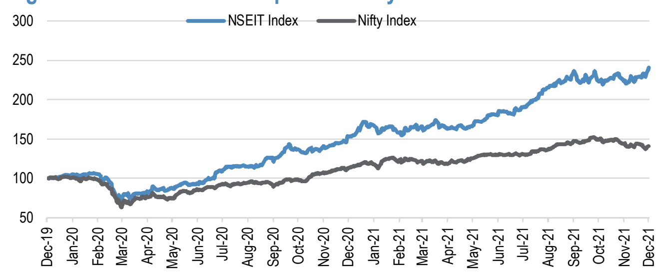
We believe valuations are reasonable at current levels and the next set of catalysts for further re-rating will be commentary on the strength of demand going into CY22. Margin pressures continue to remain from higher supply-side costs, but if companies surprise on revenue growth and manage margins within a range, then we believe IT stocks could see a further run up.

Figure 22: IT Services Index P/E relative to Nifty



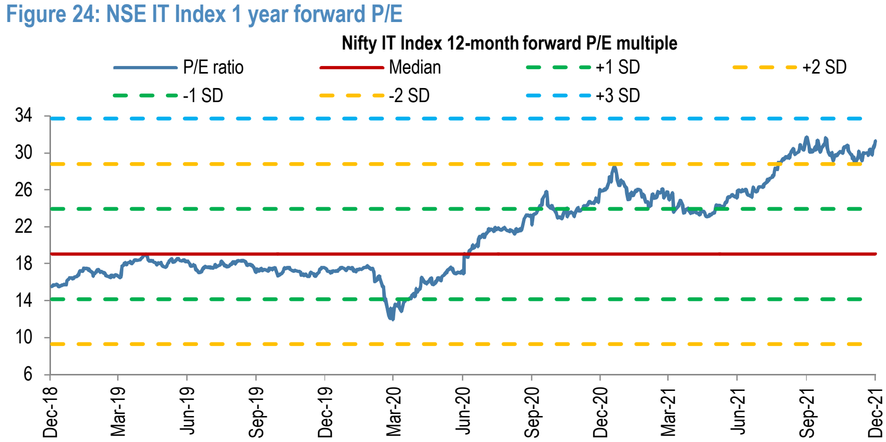
Source: Bloomberg Finance L.P.

Figure 23: IT Services Index price vs Nifty



Source: Bloomberg Finance L.P.

Figure 24: NSE IT Index 1 year forward P/E



Source: Bloomberg Finance L.P.

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Market-implied revenue growth

Table 2: Market-implied revenue growth below our estimates

Reverse DCF on $ revenue	Actual CAGR (FY15-209)	Market price implied (FY21-26)	Estimated CAGR (FY21-26JPM)	Gap
TCS	7.3	12.0	13.3	130
Infosys	8.0	14.4	15.6	120
HCLT	10.8	10.5	10.9	40
Wipro	3.4	14.4	14.2	(20)
TechM	7.2	12.3	13.5	120
LTI	14.5	19.5	18.3	(120)
Mphasis	5.6	16.0	17.2	120
Mindtree	13.4	19.9	18.7	(120)
Average	**8.8**	**14.9**	**15.2**	**34**
Reverse DCF on NOPAT	**Actual CAGR (FY15-20)**	**Market price implied (FY21-26)**	**Estimated CAGR (FY21-26JPM)**	**Gap**
TCS	11.5	13.7	15.0	130
Infosys	8.2	14.0	15.2	120
HCLT	10.8	8.6	9.0	40
Wipro	1.9	12.3	12.1	(20)
TechM	5.0	15.5	16.8	130
LTI	18.0	17.4	16.2	(120)
Mphasis	12.9	16.6	17.9	130
Mindtree	5.6	21.1	19.9	(120)
Average	**9.2**	**14.9**	**15.3**	**36**

Source: Company data, J.P. Morgan estimates

We remain constructive on IT in general given the very strong demand that may not have peaked, strong visibility and reasonable valuations. Infosys and TechM are our top IT picks for growth at a reasonable price (GARP). Mphasis is our top mid-cap pick, enjoying superior growth, reasonable valuations and improving prospects.

Table 3: Summary Financials and valuation summary for leading India Techs

	CMP (Rs)	Target (Rs)	Potential Upside	Dvd. Yield (%)	Rating	Mkt cap	Mkt cap	P/E			EV/EBITDA			EV/Sales			EV/NOPAT		
			(%)	FY22E		Rs bn	US $bn	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E	FY22E	FY23E	FY24E
IT Services - Tier 1																			
TCS	3,861	4,400	14%	2.4%	OW	14,268	192	37.0	31.6	28.4	26.2	22.8	20.5	7.4	6.5	5.9	38.3	33.0	29.6
Infosys	1,845	2,250	22%	2.2%	OW	7,750	104	35.9	30.1	26.5	24.2	20.5	18.4	6.3	5.4	4.8	37.2	31.0	27.7
Wipro	714	690	-3%	1.5%	N	3,907	53	32.9	29.0	25.8	21.4	18.6	16.8	4.6	4.1	3.7	33.7	29.4	26.3
HCL	1,311	1,400	7%	2.7%	OW	3,554	48	27.3	23.2	20.6	17.1	14.8	13.5	4.0	3.6	3.3	27.4	24.1	21.7
TechM	1,738	2,000	15%	1.7%	OW	1,685	23	25.8	22.7	20.3	19.5	16.9	15.3	3.6	3.2	2.9	32.0	27.0	24.4
LTI	7,317	6,500	-11%	0.7%	UW	1,281	17	57.0	46.6	39.9	41.4	33.2	28.6	8.1	6.7	5.7	63.1	50.5	43.4
Mphasis	3,314	4,000	21%	1.2%	OW	621	8	43.9	36.2	29.2	28.9	24.0	19.7	5.2	4.3	3.7	45.1	37.2	30.0
Mindtree	4,688	4,200	-10%	0.6%	UW	772	10	50.5	43.0	37.6	35.4	29.7	25.9	7.2	6.0	5.3	54.1	44.9	39.1

	USD Revenue				EBIT (Rs bn)				EBIT Margin (%)				PAT (Rs bn)				EPS (Rs)			
	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E
IT Services - Tier 1																				
TCS	22,174	25,500	28,745	32,015	413	485	561	624	25%	26%	26%	26%	326	388	454	504	89.3	104.5	122.3	135.8
Infosys	13,562	16,124	18,735	21,008	246	279	337	378	25%	23%	24%	24%	194	217	259	294	45.5	51.3	61.4	69.7
Wipro IT	8,320	10,612	12,127	13,389	120	139	163	181	19%	17%	18%	18%	108	119	137	156	19.1	21.7	24.6	27.6
HCLT	10,175	11,344	12,714	14,026	154	162	189	209	20%	19%	20%	20%	125	131	153	173	45.9	48.0	56.4	63.7
TechM	5,111	5,963	6,775	7,487	54	68	79	88	14%	15%	16%	16%	45	58	66	74	51.7	67.4	76.4	85.8
LTI	1,670	2,074	2,512	2,920	24	26	33	38	19%	17%	18%	18%	19	23	28	32	110.3	128.4	157.1	183.5
Mphasis	1,313	1,582	1,899	2,215	16	18	22	27	16%	15%	15%	16%	12	14	17	22	64.5	75.4	91.6	113.4
Mindtree	1,076	1,401	1,669	1,919	14	19	22	26	17%	18%	18%	18%	11	15	18	20	67.4	92.8	109.0	124.7

	ROE (%)				US$Rev Growth (%)				Revenue Growth (Rs, %)				EBIT Growth (Rs, %)				EPS Growth (%)			
	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E	FY21	FY22E	FY23E	FY24E
IT Services - Tier 1																				
TCS	38%	43%	50%	54%	1%	15%	13%	11%	5%	15%	13%	11%	10%	17%	16%	11%	4%	17%	17%	11%
Infosys	27%	28%	32%	33%	6%	19%	16%	12%	11%	19%	16%	12%	27%	14%	20%	12%	17%	13%	20%	14%
Wipro IT	19%	21%	21%	21%	-1%	28%	14%	10%	2%	28%	14%	10%	18%	16%	17%	12%	15%	14%	14%	12%
HCLT	22%	20%	23%	24%	2%	11%	12%	10%	7%	12%	12%	10%	11%	5%	16%	11%	12%	4%	18%	13%
TechM	19%	22%	23%	23%	-1%	17%	14%	11%	3%	17%	14%	11%	26%	25%	17%	11%	5%	31%	13%	12%
LTI	30%	28%	27%	25%	10%	24%	21%	16%	14%	25%	21%	16%	36%	10%	25%	16%	27%	16%	22%	17%
Mphasis	20%	21%	24%	26%	6%	20%	20%	17%	10%	21%	20%	17%	10%	15%	21%	24%	2%	17%	21%	24%
Mindtree	30%	32%	30%	28%	-1%	30%	19%	15%	3%	31%	19%	15%	76%	35%	19%	15%	76%	38%	17%	14%

Source: Bloomberg Finance L.P., J.P. Morgan estimates. Share prices are as of 5 Jan 2022.

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Table 4: Global Valuation summary for IT Services

IT Services		CY21-23E			P/E			EV/EBITDA			EV/Sales		
In INR	Div Yield (FY22E)	EBITDA CAGR	Sales CAGR	EPS CAGR	CY21E	CY22E	CY23E	CY21E	CY22E	CY23E	CY21E	CY22E	CY23E
India Peers (Large-sized)													
TCS	2.4%	12.3%	12.1%	14.0%	37.8	33.0	29.0	26.6	24.0	21.1	7.5	6.8	6.0
Infosys	2.2%	14.7%	15.0%	16.6%	36.9	31.8	27.1	24.6	21.4	18.7	6.5	5.6	4.9
Wipro Limited	1.5%	13.5%	14.3%	10.3%	32.2	31.0	26.4	21.7	18.9	16.8	5.0	4.2	3.8
HCL Technologies	2.7%	13.5%	11.2%	18.0%	29.4	24.4	21.1	17.7	15.3	13.7	4.1	3.7	3.3
Tech Mahindra	1.7%	12.4%	13.2%	16.9%	28.3	23.4	20.7	20.0	17.4	15.8	3.7	3.3	2.9
Median	2.2%	13.5%	13.2%	16.6%	32.2	31.0	26.4	21.7	18.9	16.8	5.0	4.2	3.8
Mean	2.1%	13.3%	13.2%	15.2%	32.9	28.7	24.9	22.1	19.4	17.2	5.4	4.7	4.2
India Peers (Mid-sized)													
L&T IT	0.7%	20.4%	19.9%	19.4%	59.0	48.8	41.4	42.9	34.9	29.6	8.5	7.0	5.9
Mphasis	1.2%	20.9%	19.2%	22.3%	46.0	38.1	30.8	30.2	25.1	20.7	5.4	4.5	3.8
Mindtree	0.6%	17.6%	18.8%	17.1%	53.3	45.5	38.9	37.1	31.3	26.8	7.7	6.3	5.4
Persistent	0.3%	24.9%	22.6%	25.4%	59.4	45.8	37.8	39.5	30.8	25.3	6.6	5.2	4.4
L&T Technology Services	0.4%	19.6%	18.0%	21.5%	69.9	56.1	47.4	46.7	38.3	32.6	9.6	8.1	6.9
Cyient	0.0%	15.4%	13.0%	17.0%	25.1	20.7	18.3	14.2	11.9	10.7	2.4	2.1	1.9
Tata Elxsi	0.3%	12.8%	17.9%	24.3%	79.1	62.2	51.2	57.6	49.0	45.3	16.5	13.7	11.9
KPIT Tech	0.0%	21.7%	19.0%	28.7%	68.9	51.2	41.6	39.4	31.8	26.6	6.7	5.6	4.7
Happiest Minds	0.0%	16.6%	17.1%	15.7%	108.7	92.0	81.3	82.1	69.3	60.3	19.3	16.1	14.0
Zensar	0.2%	15.4%	15.6%	21.0%	30.6	25.2	20.9	15.9	13.7	11.9	2.7	2.3	2.0
eClerx	0.0%	13.2%	13.4%	15.4%	26.0	21.8	19.5	16.6	14.5	12.9	4.8	4.2	3.7
Median	0.3%	18.6%	18.4%	21.3%	59.0	45.5	37.8	37.1	30.8	25.3	6.6	5.2	4.4
Mean	0.3%	18.4%	17.9%	21.6%	52.9	42.4	35.8	35.0	28.9	25.0	7.4	6.1	5.3
		CY21-23E			P/E			EV/EBITDA			EV/Sales		
In USD	Div Yield (FY22E)	EBITDA CAGR	Sales CAGR	EPS CAGR	CY21E	CY22E	CY23E	CY21E	CY22E	CY23E	CY21E	CY22E	CY23E
Global Peers													
IBM	4.7%	2.2%	2.8%	9.3%	13.7	12.5	11.5	9.5	9.5	9.1	2.4	2.5	2.3
Cognizant	1.0%	8.6%	7.9%	11.0%	22.2	20.1	18.0	13.5	12.4	11.5	2.5	2.3	2.1
Accenture	0.9%	12.1%	11.2%	13.8%	42.3	36.3	32.7	25.7	22.3	20.4	4.8	4.2	3.9
Capgemini	0.7%	9.5%	7.7%	14.7%	25.1	21.7	19.1	13.1	11.9	11.0	2.1	1.9	1.8
Atos	0.0%	11.9%	1.6%	18.8%	9.7	8.0	6.9	4.6	4.0	3.7	0.5	0.5	0.5
Median	0.8%	10.7%	7.8%	14.2%	23.7	20.9	18.6	13.3	12.2	11.2	2.3	2.1	2.0
Mean	0.6%	10.5%	7.1%	14.6%	24.8	21.5	19.2	14.2	12.7	11.6	2.5	2.2	2.1
BPO firms													
Genpact	0.8%	11.8%	9.9%	11.9%	21.5	19.5	17.2	15.7	14.1	12.5	2.8	2.5	2.3
Conduent	0.8%	1.0%	0.2%	NA	9.1	9.8	8.5	5.5	5.6	5.4	0.6	0.7	0.6
WNS	0.0%	11.4%	11.8%	12.4%	27.1	23.6	21.5	15.6	13.8	12.6	4.1	3.7	3.3
EXL Services	0.0%	7.2%	10.4%	6.6%	28.5	27.8	25.1	18.2	17.5	15.9	4.0	3.6	3.3
Median	0.4%	9.3%	10.1%	11.9%	24.3	21.6	19.3	15.7	14.0	12.6	3.4	3.1	2.8
Mean	0.4%	7.8%	8.1%	10.3%	21.6	20.2	18.1	13.8	12.8	11.6	2.9	2.6	2.4
Next generation IT													
EPAM	0.0%	26.6%	27.8%	27.4%	66.9	52.5	41.2	43.9	34.5	27.4	8.6	6.6	5.3
Globant	0.0%	24.6%	27.3%	22.3%	70.8	60.5	47.3	40.6	32.1	26.2	8.4	6.5	5.2
Endava	0.0%	26.4%	26.5%	24.7%	93.5	72.7	60.1	44.8	35.0	28.0	10.8	8.3	6.8
Median	0.0%	26.4%	27.3%	24.7%	70.8	60.5	47.3	43.9	34.5	27.4	8.6	6.6	5.3
Mean	0.0%	25.9%	27.2%	24.8%	77.1	61.9	49.6	43.1	33.9	27.2	9.3	7.2	5.7

Source: Bloomberg Finance L.P., J.P. Morgan estimates. JPM estimates are TCS, Infosys, Wipro, HCLT, TechM, L&T IT, Mphasis, Mindtree. Rest all are based on Bloomberg consensus estimates

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Companies Discussed in This Report (all prices in this report as of market close on 06 January 2022)
HCL Technologies(HCLT.NS/Rs1285/OW), Infosys(INFY.NS/Rs1818/OW), L&T Infotech(LRTI.NS/Rs7191.25/UW), Mindtree(MINT.NS/Rs4612/UW), Mphasis(MBFL.NS/Rs3257/OW), Tata Consultancy Services(TCS.NS/Rs3807/OW), Tech Mahindra Ltd.(TEML.NS/Rs1692/OW), Wipro Ltd.(WIPR.NS/Rs706/N)

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