Deutsche Bank Markets Research



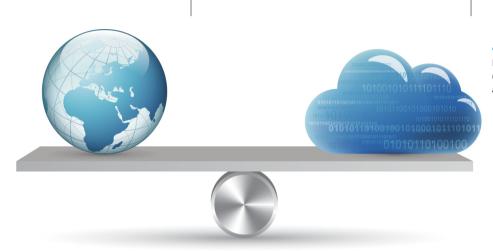


Industry Indian IT Services

Date
2 December 2014

Asia India Technology

Software & Services



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F.I.T.T. for investors

Growth but not as we know it

Indian IT exports to double to USD155bn in 2020

A new era in IT outsourcing is changing the skill set required for success as well as fundamentally shifting the pricing outlook in the industry. Digital tech is as much of a challenge as an opportunity for the Indian vendors as it will take an increased share of customers' IT budget but is an area where they have less expertise than in services. To offset this challenge, industry winners will need to expand their customer base geographically and ensure they achieve or maintain strategic vendor status with key clients. In spite of these issues, we forecast a doubling in IT and BPO exports to USD155bn by 2020 and argue TCS is best placed to win market share, while HCL is most vulnerable.

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Digital technology spend to drive growth

Corporate IT budgets, while not growing in total value, are increasingly skewed away from hardware and software and toward services. Within services, the cloud is standardising certain products and cutting price points for Infrastructure Management Services (IMS) so vendors need to deliver solutions using the new social, mobility and analytic tools that will enhance revenue for their clients. We believe digital technology spend will be 16% of the total IT services spend by 2018. This will provide growth opportunities for vendors that have a diversified service presence and enjoy strategic vendor status with their top customers.

Proprietary eight-factor analysis of the market

As cloud delivery of services changes the revenue potential for the sector, we identify eight parameters that will likely determine success in this new era: (a) strategic vendor partnerships, (b) geographic diversification, (c) digital technology readiness, (d) service innovation, (e) controlling attrition to manage customer perception, (f) customers' focus on captives, (g) tackling competition from Eastern European vendors, and (h) competition from niche Tier II offshore IT service providers.

TCS best placed to gain share

TCS is considered a strategic vendor by most of its top customers. Its strong presence in Continental Europe, proactive investment in Japan and focus on new technology are added advantages. Tech Mahindra gains from (a) sales aggression in the telecom business and (b) strong client relationships in the enterprise business (Satyam). For Infosys to reclaim its sector leader status, it will have to address issues such as (a) loss of strategic vendor status, (b) high attrition and (c) its positioning and presence in markets outside North America. Wipro and HCL Tech score poorly on most parameters. We hence downgrade Wipro to Hold and retain our Sell rating on HCL Tech

Valuing top tier Indian vendors at one year forward P/E of 12-24x

We base our target prices on P/E multiples, considering historical trading ranges, peers and growth rates. We believe our target multiples fairly reflect an improvement in the global macroeconomic environment. Key risks: recession in the US and Europe affecting technology spend and rupee appreciation or depreciation.

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Key Changes	3	
Company	Target Price	Rating
TCS.BO	3,000.00 to 3,170.00(INR)	-
INFY.BO	4,400.00 to 4,750.00(INR)	-
WIPR.BO	640.00 to 610.00(INR)	Buy to Hold
HCLT.BO	1,200.00 to 1,230.00(INR)	-
TEML.BO	3,300.00 to 3,500.00(INR)	-
Source: Deutsche		

Top picks

Tata Consultancy (TCS.BO),INR2,693.70	Buy
Tech Mahindra Ltd	Buy
(TEML.BO),INR2,658.45	
Source: Deutsche Bank	

Companies Featured

Tata Consultancy (TCS.B	O),INR2,	693.70	Buy
	2014A	2015E	2016E
P/E (x)	19.3	24.7	20.8
EV/EBITDA (x)	14.0	18.5	15.2
Price/book (x)	7.6	8.2	6.5
Infosys Limited (INFY.BO),INR4,3!	50.00	Buy
	2014A	2015E	2016E
P/E (x)	16.1	20.5	18.3
EV/EBITDA (x)	10.6	14.2	12.1
Price/book (x)	3.9	4.6	4.0
Wipro (WIPR.BO),INR593	3.00		Hold
	2014A	2015E	2016E
P/E (x)	14.3	16.6	15.4
EV/EBITDA (x)	10.1	11.0	9.6
Price/book (x)	3.9	3.5	3.0
HCL Tech (HCLT.BO),INR	1,670.00)	Sell
	2014A	2015E	2016E
P/E (x)	13.6	17.4	16.4
EV/EBITDA (x)	8.8	11.2	9.4
Price/book (x)	5.2	4.4	3.5
Tech Mahindra Ltd (TEML.BO),INR2,658.45			Buy
	2014A	2015E	2016E
P/E (x)	11.3	17.7	13.5
EV/EBITDA (x)	5.9	12.6	9.8
Price/book (x)	4.1	3.9	3.0
Source: Deutsche Bank			

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Tech Mahindra – Share gains drive further upside potential



Executive summary

India's share of global sourcing to increase

Recent sector discourse has been focused on the impact of digital technologies – namely SMAC (social, mobility, analytics and cloud) – on the revenue profiles of Indian vendors. Without dismissing the importance of SMAC, we believe vendors' success in expanding their geographical footprints will be a better determinant of the long-term growth trajectory for the sector and individual vendors.

India will remain a preferred destination for global sourcing due to its large and diversified talent pool with an emphasis on learning, knowledge management and the training of fresh engineering graduates. We expect Indian IT and BPO exports to double to USD155bn in 2020 and contribute 7% of India's GDP in FY20E (vs. 6% in FY14). Its share of worldwide IT and BPO spending should rise to ~15% (vs. 9% in 2014). Similarly, ~58% of the global sourcing spend will likely be directed towards India (vs. 52% in FY14).

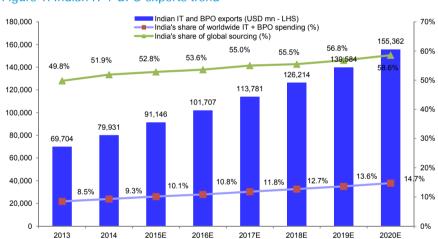


Figure 1: Indian IT + BPO exports trend

Source: IDC, Deutsche Bank

The jury is still out on the potential impact of digital technologies on IT service vendors. However, expansion of the geographical footprint of the first and second generation outsourcers, especially in Continental Europe (Germany and France) and Japan, should be able to mitigate any potential headwinds to revenue growth from SMAC (especially cloud) adoption by third-generation outsourcers in North America. With an objective of defending their share with existing customers and expanding their footprint for growth, we believe successful offshore IT service providers will adopt a three-pronged strategy:

- 1. Deepen existing relationships by achieving strategic vendor status
- 2. Geographical and vertical expansion
- Capability enhancement to address the threat/opportunities from digital technologies



Proprietary eight-factor analysis of the market

Based on the above, we identify eight parameters that we believe will determine the success of Indian vendors in gaining share and maintaining healthy growth rates.

- Strategic vendor partnerships Given the focus on fully integrated delivery models, which includes hybrid global operating models based on shared service centres and Centres of Excellence, we believe it is important for vendors to be a strategic sourcing partner to win share, especially in mature outsourcers like financial services customers.
- 2. Geographical diversification is imperative The Indian IT services industry still derives a majority of its revenues from the Anglo Saxon markets. Though the US and UK contribute <50% of global enterprise IT service spend, they account for >75% of the revenues of the Indian IT service sector (see Figure 20 and Figure 21). Consequently, amongst the top five enterprise IT service spending countries (the US, Japan, UK, Germany and France), the Indian IT services sector has double-digit penetration only in the US and UK (see Figure 23). Given the penetration mismatch and the relative size of the top tier Indian vendors, most Indian vendors are investing in three key markets: Germany, France and Japan.
- Digital technology spend threat or opportunity? Our extensive channel checks suggest that while overall IT spend (includes hardware, software and services) will be flat to down over our forecast period, the spend mix should change in favour of services. Spend on new technologies (SMAC - social, mobility, analytics and cloud), especially cloud, can be deflationary for existing spend on IMS (infrastructure management services) as intense price competition and consolidation will put pressure on laaS (infrastructure as a service) price points. This will be particularly negative for HCL Tech, which derives ~35% of its revenues from the service line. On the other hand, spend on revenue-enhancing initiatives like social, mobility and analytics will increase, as will new application development and SaaS (software as a service) package customisation for cloud delivery. This should provide growth opportunities for vendors that have a diversified service presence and enjoy strategic vendor status with their top customers. We expect TCS to be a prime beneficiary of this trend. IDC forecasts digital technology spending will account for over 100% of all IT spending growth in 2013-18. As with most trends in IT adoption, the United States will be the largest spender on cloud services and will account for ~60% of IT cloud services spending in 2018. Western Europe will be a distant second with a share of 23% in 2018. The rest of the world (including Japan) will account for only 17% of the overall spending. More importantly, ~27% of the overall IT services spending from North America in 2018 will be on public IT cloud services, compared to a dismal 12% for Western Europe and 4% for Japan.



- 4. Service innovation and moving up the value chain Some of the largest users of offshore IT services still use the Indian vendors predominantly for tech support and development. Designing functional services and tech architecture are considered higher value add services, which are still the preserve of the MNC vendors like Accenture, IBM, etc, although we see TCS frequently challenging this notion. A lack of intellectual property (IP), capability or knowledge and the necessary investment in new technologies are key reasons for the Indian vendors' weak presence. An ability to move into this area in the coming years will be a key differentiating factor for Indian players, especially to win large end-to-end consulting and outsourcing engagements.
- 5. Attrition Attrition is a top factor affecting customer perception of service quality and satisfaction. It hurts the retention of domain knowledge. Customers usually track vendor staff attrition closely. Vendors that manage to maintain low attrition rates (10-14%) stand a good chance of outperforming peers and winning new business.
- 6. Rising importance of captives; not a major threat yet While captives (i.e. wholly owned subsidiaries located in an offshore/near shore location that perform IT work for the parent company) have been used by customers alongside vendors, a refocus on captives could be potentially negative for vendors. Customers are also experimenting with 'ruralsourcing' in the US. Our channel checks suggest US-based employees are on average about 4x more productive than employees at offshore vendors in India (and as much as 7x more productive in some skill-sets). While the trend is universally negative for most Indian vendors, adoption has only been sporadic. Recent datapoints suggest Infosys, HCL Tech and Cognizant have been hit as some of their key customers have moved work back into captives.
- Competition from Central European vendors Central European vendors provide quality delivery but lack scale. Our channel checks suggest customers rate the Central European vendors highly on quality of service. Indian vendors, however, win on scale
- 8. Competition from Tier II vendors Mature outsourcers who previously consolidated volumes with Tier I vendors after the global financial crisis are returning to Tier II Indian IT service companies and niche players. Tier II vendors such as Mindtree, Hexaware, Polaris and Virtusa are winning deals in higher value add services at the expense of the Tier I vendors because of their quick turnaround time and greater senior management engagement. For global rollouts, we believe customers would prefer Tier I vendors for their scale and geographical presence.



Figure 2: Changing IT	spending landscape -	 relative positioning 	of top tier Indian vendors

Sr	.No	Scorecard parameters	Description	Rank attrac	ing of stock	s from 1 to	o 5, with 8	being I	east	
				HCL	Tech Info	osys	TCS	Tecl Mahin		/ipro
1		Strategic vendor partnerships	Top three vendor status with key customers		3.5	3.0	1.0)	2.0	4.0
2		Geographic diversification			2.5	3.3	1.0	<u> </u>	3.8	3.3
	2A	Positioning in Continental Europe	In particular exposure to Germany + France	2.0	3.0	1.0		2.5	3.8	5
	2B	Positioning in Japan	Investment made in Japan	3.0	3.5	1.0		5.0	3.0	0
3		SMAC	Readiness in addressing this opportunity and defending turf		4.0	1.5	1.5	ı	3.0	2.5
4		Service innovation and moving up the value chain	Providing IT consulting and business impact services versus cost takeouts		4.5	3.0	2.5	ı	4.0	4.0
5		Attrition	Ensuring attrition does not affect customer perception adversely		3.0	5.0	1.0	1	2.0	3.0
6		Captives	Ability to defend business versus threat from captives		2.5	3.0	2.0	1	2.5	2.5
7		Central European vendors	Ability to defend business versus threat from competition		2.5	1.0	1.0)	3.5	2.0
8		Tier II vendors	Defence against competition from tier II vendors		2.5	3.0	1.0)	2.0	2.5
		Average of 8 parameters			3.1	2.8	1.4		2.8	3.0
So	urce: D	eutsche Bank								

Weak rupee to mitigate margin headwinds

We see two key margin headwinds as a consequence of the above factors. Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, (c) M&A to address skill and capability gaps and (d) higher SG&A expenses will be potentially margin dilutive. Cloud adoption will put pressure on pricing and volumes in traditional business (especially IMS) and hence is an additional margin headwind. However, prolonged rupee weakness will likely help limit the margin decline and ensure Indian IT companies maintain their healthy earnings CAGR of 9-14% over FY15-20E. In a recent report titled "India 2020: The Road to East Asia", dated 1 September 2014, our economists outline their expectations for the rupee to weaken against the US dollar from YTD levels (to a range of 63-65 over the next five years). This should cushion the negative impact of the factors mentioned above and keep EBIT margin above 20% over the next five years (although admittedly lower than the 25% seen in FY14). Across the sector, a 1% weaker INR/USD leads to a (1.5-1.9%) increase in earnings.

Figure 3: Increase in earnings for every 1% depreciation of INR vs. USD

1 0	0		
Company			% change in net income
Infosys			1.46
TCS			1.73
Wipro			1.63
HCL Tech			1.87
Source: Deutsche Bank			





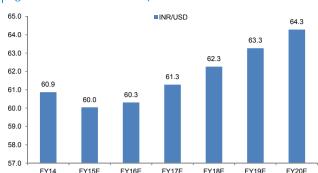
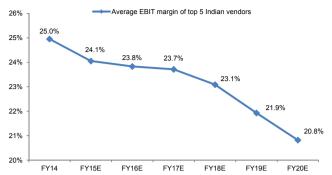


Figure 5: Average EBIT margin of top five Indian vendors



Source: Bloomberg Finance L.P., Deutsche Bank

Source: Company data, Deutsche Bank

TCS is our favoured Indian vendor, followed by Tech Mahindra

TCS, followed by Tech Mahindra, appears to be the best positioned vendor on our eight-parameter screen, which compares the relative attractiveness of the top five Indian vendors in terms of making share gains in a changing IT spending landscape (see Figure 2).

- Our conversations with customers suggest that many view TCS as a strategic vendor. Its strong presence in Continental Europe, proactive investment in Japan, focus on evolutionary transformation and innovation in new technology, and consistent service delivery thanks to low attrition are added advantages.
- Tech Mahindra, meanwhile, gains from the twin advantages of (a) sales aggression in the telecom business and (b) strong client relationships in the enterprise business (Satyam).
- Infosys' business model is with puts and takes. To reclaim its sector leader status, we believe it will have to address issues like its (a) loss of strategic vendor status, (b) high attrition (which affects customer perception of delivery quality) and (c) positioning and presence in markets outside North America.
- Wipro and HCL Tech score poorly on most parameters.

We include separate company sections later in this report.

lFi	iaure	6:	Recommendation	summary	V

19		,				
Company	Recommendation	FY16E EPS (INR)	Target PE	Target Price (INR)	Current price (INR)	Upside/ (Downside)
TCS	Buy	129.7	24	3,170	2,630	21%
Tech Mahindra	Buy	197.4	18	3,500	2,521	39%
Infosys	Buy	237.6	19	4,550	4,097	11%
Wipro	Hold	37.7	15	610	565	8%
HCL Tech	Sell	100.6	12	1,230	1,615	-31%
Source: Deutsche Bank	estimates					



Key forecasts and assumptions and industry comps

Figure 7: Key f		nfosys			TCS			Wipro			HCL Tech		Т	ech Mahi	ndra	
		11100y3			-		vvipio				TOE TOUR					
	FY16E	FY17E	CAGR FY15- FY17E	FY16E	FY17E	CAGR FY15- FY17E	FY16E	FY17E	CAGR FY15- FY17E	FY16E	FY17E	CAGR FY15- FY17E	FY16E	FY17E	CAGR FY15- FY17E	
Revenue (USDm) INRm	10,099	11,671	14.4%	18,814	22,000	17.7%	8,157	9,219	13.0%	6,667	7,530	12.6%	4,526	5,348	20.2%	
Revenue	609,047	715,229	15.6%	1,134,721	1,348,159	18.9%	538,706	624,252	15.0%	403,659	463,306	13.9%	272,966	327,727	21.4%	
Gross Profit	238,291	275,556	12.8%	533,099	619,391	19.4%	185,864	208,928	11.8%	147,206	165,588	12.0%	101,614	119,582	22.7%	
EBITDA	171,295	204,034	16.3%	323,753	390,877	19.7%	122,285	135,461	10.4%	98,360	110,522	11.6%	53,994	62,224	17.8%	
EBIT	154,394	179,585	14.0%	303,828	367,979	20.3%	108,716	120,727	10.5%	89,564	100,397	10.8%	47,397	55,000	18.9%	
Net Income	135,926	165,345	16.5%	254,952	313,416	28.0%	93,038	102,864	9.3%	72,906	81,459	8.8%	42,172	49,899	24.6%	
EPS	237.6	289.1	16.5%	129.7	159.6	21.2%	37.7	41.7	9.0%	100.6	112.4	8.3%	197.4	233.5	24.6%	
Margins			bps yoy			bps yoy			bps yoy			bps yoy			bps yoy	
Gross Margin	39.1%	38.5%	-60	47.0%	45.9%	-104	34.5%	33.5%	-100	36.5%	35.7%	-73	37.2%	36.5%	-74	
EBITDA Margin	28.1%	28.5%	40	28.5%	29.0%	46	22.7%	21.7%	-100	24.4%	23.9%	-51	19.8%	19.0%	-79	
EBIT Margin	25.4%	25.1%	-24	26.8%	27.3%	52	20.2%	19.3%	-84	22.2%	21.7%	-52	17.4%	16.8%	-58	
Net Income Margin	22.3%	23.1%	80	22.5%	23.2%	78	17.3%	16.5%	-79	18.1%	17.6%	-48	15.4%	15.2%	-22	
Re/USD	60.3	61.3	1.0%	60.0	61.3	1.0%	60.1	61.3	0.7%	60.5	61.5	1.1%	60.3	61.3	1.0%	
Billing rates/ manmonth (USD)																
Onsite	12,557	12,878	1.3%	8,338	8,463	1.3%	12,084	12,084	-0.2%	13,941	13,941	0.0%				
Offshore	3,873	3,972	1.3%	3,085	3,131	1.3%	4,322	4,322	-0.1%	3,813	3,813	0.0%				
Manpower cost/manmonth (USD)																
Onsite	8,640	8,813	1.9%	4,397	4,485	2.0%	6,724	6,858	2.0%	7,451	7,526	1.0%				
Offshore	1,128	1,199	6.9%	1,367	1,507	10.9%	935	1,012	9.2%	1,456	1,547	6.8%				
Net employees added	24,050	26,000	47.2%	73,302	130,116	40.0%	19,358	20,069	41.7%	6,677	3,548	2.7%				
Revenue/employe e (USD)	51,404	52,464	0.7%	48,549	45,224	0.7%	53,561	56,242	4.5%	51,703	54,780	3.2%				
Cost per	28,877	29,628	2.4%	26,341	25,511	4.8%	23,903	25,514	-9.3%	31,477	34,254	6.1%				

employee (USD)
Source: Deutsche Bank estimates



Figure 8: Comp	oarative v	/aluation												
Company Names	Reuters Ticker	Reco	Target Price	Current Price	Mcap (USDm)		P/E(x)			EV/EBITD	A	Revenue CAGR	Earnings CAGR	PEG
						FY15E/C Y14E	FY16E/C Y15E	FY17E/C Y16E	FY15E/C Y14E	FY16E/C Y15E	FY17E/C Y16E	FY15- FY17/ CY14- CY16	FY15- FY17/ CY14- CY16	
Large Cap Indian vendors			INR	INR	USD									
Tata Consultancy Services	TCS.NS	Buy	3,170	2,632	83,256	24.2	21.0	18.2	18.7	16.4	14.4	15.8%	15.4%	1.4
Infosys	INFY.NS	Buy	4,750	4,277	39,472	20.4	18.7	16.3	14.1	12.8	11.3	12.2%	11.9%	1.6
Wipro	WIPR.NS	Hold	610	575	22,781	16.2	14.4	11.9	11.0	9.6	7.8	17.3%	17.0%	0.9
HCL Tech#	HCLT.NS	Sell	1,230	1,619	18,271	17.3	16.7	15.6	11.1	10.3	9.5	10.2%	5.1%	3.3
Tech Mahindra	TEML.NS	Buy	3,500	2,616	9,823	17.4	13.8	12.3	11.0	9.5	8.7	17.9%	19.3%	0.7
Average						19.1	16.9	14.8	13.2	11.7	10.3	14.7%	13.8%	1.6
MidCap peers			INR	INR	USD									
Mphasis	MBFL.NS	No Reco	NA	412	NA	12.4	11.1	NA	7.3	6.7	NA	NA	NA	NM
Polaris Financial Technologies	POLF.NS	No Reco	NA	201	323	10.6	9.5	NA	7.1	6.4	NA	NA	NA	NM
Mindtree	MINT.NS	Hold	770	1,201	1,636	19.8	17.2	14.7	12.3	10.5	9.1	18.0%	16.0%	1.1
Hexaware#	HEXT.NS	No Reco	NA	213	1,032	19.6	15.9	14.0	13.2	10.9	9.7	14.5%	21.0%	8.0
KPIT Technologies	KPIT.NS	No Reco	NA	169	510	12.7	10.0	8.7	8.1	6.4	5.4	13.6%	22.2%	0.5
NIIT Technologies	NIIT.NS	No Reco	NA	380	371	12.3	9.3	NA	6.1	5.2	NA	NA	NA	NM
Average						14.6	12.2	12.5	9.0	7.7	8.1	15.4%	19.7%	0.8
International peers			USD	USD	USD									
Cognizant#	CTSH.OQ	Buy	58	53.3	32,194	20.7	18.6	NA	13.4	12.0	NA	NA	NA	NM
Accenture#	ACN.N	Buy	89	85.3	52,484	17.7	16.2	NA	10.2	9.6	NA	NA	NA	NM
IBM#	IBM.N	Hold	180	161.8	196,359	10.2	9.9	9.2	10.2	9.9	9.2	-1.0%	12.2%	8.0
CSC	CSC.N	Hold	55	63.1	9,763	13.6	12.4	NA	4.1	3.9	NA	NA	NA	NM
Cap Gemini (EUR)#	CAPP.PA	No Reco	NA	58.5	9,175	16.4	14.8	13.5	8.1	7.4	7.0	4.0%	10.1%	1.5

14.4

15.7

9.2

11.3

8.1

8.6

1.5%

11.2%

1.1

Average

Source: Company data, Deutsche Bank, Bloomberg Finance L.P. Prices as of 26 Nov 2014



India's share of global sourcing to increase

Key highlights

- We expect the global sourcing market to expand at a 10% CAGR over 2013-20E, versus 3.6% growth in worldwide IT + BPO spending over the same period.
- India remains the global leader with an overall share of 50% of global sourcing in 2013.
- The total global sourcing market of USD140bn accounts for only 17% of global IT and BPO spending, indicating significant headroom for growth.
- We expect Indian IT services and BPO exports to register a 12% CAGR over FY13-20E.
- The IT services market is fairly underpenetrated from an offshore standpoint. We believe vendors need to follow a three-pronged strategy to gain share:
- Deepen existing relationships by achieving strategic vendor status
- Geographic and vertical expansion
- Capability enhancement to address the threat/opportunities from digital technologies

Three-pronged approach to increasing share

The introduction of digital technologies (social, mobility, analytics and cloud) heralds the start of a new decadal tech cycle, which could potentially lead to significant changes to the existing revenue streams of the Indian vendors.

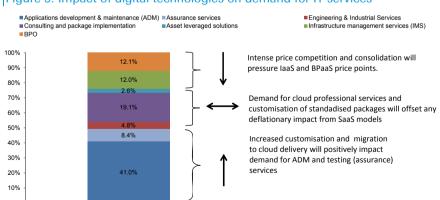


Figure 9: Impact of digital technologies on demand for IT services

Source: TCS- Company data, Deutsche Bank



We believe the Indian IT services industry could still report healthy growth rates over the long term. The IT services market is still fairly underpenetrated from an offshore standpoint (see Figure 10 and Figure 11) and we believe vendors need to follow a three-pronged strategy to gain share:

- 1. Deepen existing relationships by achieving strategic vendor status
- 2. Geographic and vertical expansion
- Capability enhancement to address the threat/opportunities from digital technologies

We discuss these factors in more detail later in this report.

Figure 10: Market shares of Indian IT services by vertical

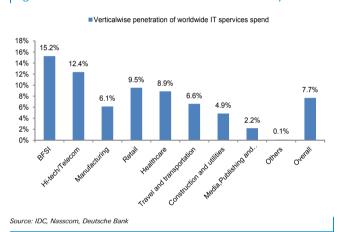


Figure 11: Market shares of Indian IT services by region



Source: IDC, Nasscom, Deutsche Bank

Global sourcing spend to outpace growth in worldwide IT-BPO spending

While the growth in IT-BPO spend is expected to be gradual over the next few years, it will be outpaced by global sourcing spend. We expect the global sourcing market to record a 10% CAGR over 2013-20E, versus 3.6% growth in worldwide IT + BPO spending over the same period.

India remains the global leader with an overall share of 50% of global sourcing in 2013: India's share in IT outsourcing stood at 61% and in BPO at 38%. The total global sourcing market of USD140bn accounts for only 17% of global IT and BPO spending, indicating significant headroom for growth (see Figure 12).

In our view, Indian IT-BPO firms are well set to take advantage of this opportunity by improving their existing capabilities, developing new capabilities and expanding their focus to new services, technologies, verticals and geographies.

In the following sections, we discuss in detail the opportunities and challenges for the vendors. This is supported by our view on the positioning and readiness of each of the top tier Indian vendors in addressing these markets.

Figure 12: Indian IT services n		,													
Particulars	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Market size (USDm)															
Worldwide IT + BPO spending	530,439	599,880	666,103	718,168	733,000	758,000	795,000	823,000	860,062	899,276	937,404	965,526	•	1,024,327	
IT services	467,015	527,682	556,578	566,168	586,000	605,000	636,000	655,000	683,391	712,902	741,025	763,256	786,153	809,738	834,030
ВРО	63,424	72,198	109,525	152,000	147,000	153,000	159,000	168,000	176,671	186,374	196,379	202,271	208,339	214,589	221,027
Global sourcing spend	65,000	76,000	93,000	96,000	106,000	126,000	130,000	140,000	154,000	172,480	189,728	206,804	227,484	245,683	265,337
IT services	40,000	47,000	56,000	58,000	64,000	76,000	80,000	85,000	93,500	104,720	115,192	125,559	138,115	149,164	161,098
ВРО	25,000	29,000	37,000	38,000	42,000	50,000	50,000	55,000	60,500	67,760	74,536	81,244	89,369	96,518	104,240
India IT and BPO exports	24,694	30,686	36,829	40,070	46,692	54,969	61,735	69,704	79,931	91,146	101,707	113,781	126,214	139,584	155,362
IT services	16,894	21,175	25,576	27,845	32,962	39,490	44,347	50,292	56,779	64,469	72,078	87,445	100,651	113,254	123,120
BPO	7,800	9,511	11,253	12,226	13,729	15,479	17,388	19,412	23,152	26,677	29,629	26,336	25,563	26,330	32,242
Revenues of top five Indian vendors	8,024	11,463	15,622	17,213	19,214	24,058	29,701	32,506	36,765	41,659	48,368	56,094	64,086	71,822	80,247
TCS	2,974	4,116	5,716	6,013	6,342	8,187	10,169	11,568	13,440	15,886	18,814	22,000	25,189	28,413	32,051
Infosys	2,153	3,089	4,176	4,664	4,801	6,042	6,996	7,400	8,250	8,914	10,099	11,671	13,311	14,840	16,544
Wipro	1,638	2,220	2,917	3,363	4,390	5,221	5,921	6,218	6,618	7,219	8,157	9,219	10,409	11,747	13,257
HCL Tech	979	1,390	1,879	2,188	2,705	3,545	4,152	4,686	5,359	5,939	6,667	7,530	8,402	9,193	9,946
Tech Mahindra	281	648	935	985	977	1,063	2,464	2,633	3,098	3,700	4,632	5,673	6,775	7,630	8,449
Market share															
Global sourcing/ worldwide IT+ BPO spending	12.3%	12.7%	14.0%	13.4%	14.5%	16.6%	16.4%	17.0%	17.9%	19.2%	20.2%	21.4%	22.9%	24.0%	25.1%
IT services	8.6%	8.9%	10.1%	10.2%	10.9%	12.6%	12.6%	13.0%	13.7%	14.7%	15.5%	16.5%	17.6%	18.4%	19.3%
BPO	39.4%	40.2%	33.8%	25.0%	28.6%	32.7%	31.4%	32.7%	34.2%	36.4%	38.0%	40.2%	42.9%	45.0%	47.2%
India's share of															
IT services+ BPO															
Worldwide IT services spending	4.7%	5.1%	5.5%	5.6%	6.4%	7.3%	7.8%	8.5%	9.3%	10.1%	10.8%	11.8%	12.7%	13.6%	14.7%
Global sourcing	38.0%	40.4%	39.6%	41.7%	44.0%	43.6%	47.5%	49.8%	51.9%	52.8%	53.6%	55.0%	55.5%	56.8%	58.6%
IT services															
Worldwide IT services spending	3.6%	4.0%	4.6%	4.9%	5.6%	6.5%	7.0%	7.7%	8.3%	9.0%	9.7%	11.5%	12.8%	14.0%	14.8%
Global sourcing	42.2%	45.1%	45.7%	48.0%	51.5%	52.0%	55.4%	59.2%	60.7%	61.6%	62.6%	69.6%	72.9%	75.9%	76.4%
ВРО															
Worldwide IT services spending	12.3%	13.2%	10.3%	8.0%	9.3%	10.1%	10.9%	11.6%	13.1%	14.3%	15.1%	13.0%	12.3%	12.3%	14.6%
Global sourcing	31.2%	32.8%	30.4%	32.2%	32.7%	31.0%	34.8%	35.3%	38.3%	39.4%	39.8%	32.4%	28.6%	27.3%	30.9%
Share of top five Indian vendors															
Of worldwide IT+ BPO spending	1.5%	1.9%	2.3%	2.4%	2.6%	3.2%	3.7%	3.9%	4.3%	4.6%	5.2%	5.8%	6.4%	7.0%	7.6%
TCS	0.6%	0.7%	0.9%	0.8%	0.9%	1.1%	1.3%	1.4%	1.6%	1.8%	2.0%	2.3%	2.5%	2.8%	3.0%
Infosys	0.4%	0.5%	0.6%	0.6%	0.7%	0.8%	0.9%	0.9%	1.0%	1.0%	1.1%	1.2%	1.3%	1.4%	1.6%
Wipro	0.3%	0.4%	0.4%	0.5%	0.6%	0.7%	0.7%	0.8%	0.8%	0.8%	0.9%	1.0%	1.0%	1.1%	1.3%
HCL Tech	0.2%	0.2%	0.3%	0.3%	0.4%	0.5%	0.5%	0.6%	0.6%	0.7%	0.7%	0.8%	0.8%	0.9%	0.9%
Tech Mahindra Source: IDC, Nasscom, Deutsche Bank	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.3%	0.3%	0.4%	0.4%	0.5%	0.6%	0.7%	0.7%	0.8%



2 December 2014 Software & Services Indian IT Services

Figure 12: Indian IT services r	narket sh	are analy	sis Co	ont'd											
Particulars	2006	2007	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E	2017E	2018E	2019E	2020E
Of Global Sourcing	12.3%	15.1%	16.8%	17.9%	18.1%	19.1%	22.8%	23.2%	23.9%	24.2%	25.5%	27.1%	28.2%	29.2%	30.2%
TCS	4.6%	5.4%	6.1%	6.3%	6.0%	6.5%	7.8%	8.3%	8.7%	9.2%	9.9%	10.6%	11.1%	11.6%	12.1%
Infosys	3.3%	4.1%	4.5%	4.9%	4.5%	4.8%	5.4%	5.3%	5.4%	5.2%	5.3%	5.6%	5.9%	6.0%	6.2%
Wipro	2.5%	2.9%	3.1%	3.5%	4.1%	4.1%	4.6%	4.4%	4.3%	4.2%	4.3%	4.5%	4.6%	4.8%	5.0%
HCL Tech	1.5%	1.8%	2.0%	2.3%	2.6%	2.8%	3.2%	3.3%	3.5%	3.4%	3.5%	3.6%	3.7%	3.7%	3.7%
Tech Mahindra	0.4%	0.9%	1.0%	1.0%	0.9%	0.8%	1.9%	1.9%	2.0%	2.1%	2.4%	2.7%	3.0%	3.1%	3.2%
Of India IT+ BPO exports	32.5%	37.4%	42.4%	43.0%	41.2%	43.8%	48.1%	46.6%	46.0%	45.7%	47.6%	49.3%	50.8%	51.5%	51.7%
TCS	12.0%	13.4%	15.5%	15.0%	13.6%	14.9%	16.5%	16.6%	16.8%	17.4%	18.5%	19.3%	20.0%	20.4%	20.6%
Infosys	8.7%	10.1%	11.3%	11.6%	10.3%	11.0%	11.3%	10.6%	10.3%	9.8%	9.9%	10.3%	10.5%	10.6%	10.6%
Wipro	6.6%	7.2%	7.9%	8.4%	9.4%	9.5%	9.6%	8.9%	8.3%	7.9%	8.0%	8.1%	8.2%	8.4%	8.5%
HCL Tech	4.0%	4.5%	5.1%	5.5%	5.8%	6.4%	6.7%	6.7%	6.7%	6.5%	6.6%	6.6%	6.7%	6.6%	6.4%
Tech Mahindra	1.1%	2.1%	2.5%	2.5%	2.1%	1.9%	4.0%	3.8%	3.9%	4.1%	4.6%	5.0%	5.4%	5.5%	5.4%
Market Growth (yoy)															
Worldwide IT + BPO spending		13.1%	11.0%	7.8%	2.1%	3.4%	4.9%	3.5%	4.5%	4.6%	4.2%	3.0%	3.0%	3.0%	3.0%
IT services		13.0%	5.5%	1.7%	3.5%	3.2%	5.1%	3.0%	4.3%	4.3%	3.9%	3.0%	3.0%	3.0%	3.0%
BPO		13.8%	51.7%	38.8%	-3.3%	4.1%	3.9%	5.7%	5.2%	5.5%	5.4%	3.0%	3.0%	3.0%	3.0%
Global sourcing spend		16.9%	22.4%	3.2%	10.4%	18.9%	3.2%	7.7%	10.0%	12.0%	10.0%	9.0%	10.0%	8.0%	8.0%
IT services		17.5%	19.1%	3.6%	10.3%	18.8%	5.3%	6.3%	10.0%	12.0%	10.0%	9.0%	10.0%	8.0%	8.0%
BPO		16.0%	27.6%	2.7%	10.5%	19.0%	0.0%	10.0%	10.0%	12.0%	10.0%	9.0%	10.0%	8.0%	8.0%
India IT and BPO exports		24.3%	20.0%	8.8%	16.5%	17.7%	12.3%	12.9%	14.7%	14.0%	11.6%	11.9%	10.9%	10.6%	11.3%
IT services		25.3%	20.8%	8.9%	18.4%	19.8%	12.3%	13.4%	12.9%	13.5%	11.8%	21.3%	15.1%	12.5%	8.7%
BPO		21.9%	18.3%	8.6%	12.3%	12.7%	12.3%	11.6%	19.3%	15.2%	11.1%	-11.1%	-2.9%	3.0%	22.5%
Revenues of top five Indian vendors		42.9%	36.3%	10.2%	11.6%	25.2%	23.5%	9.4%	13.1%	13.3%	16.1%	16.0%	14.2%	12.1%	11.7%
TCS		38.4%	38.9%	5.2%	5.5%	29.1%	24.2%	13.8%	16.2%	18.2%	18.4%	16.9%	14.5%	12.8%	12.8%
Infosys		43.5%	35.2%	11.7%	2.9%	25.8%	15.8%	5.8%	11.5%	8.1%	13.3%	15.6%	14.1%	11.5%	11.5%
Wipro		35.6%	31.4%	15.3%	30.5%	18.9%	13.4%	5.0%	6.4%	9.1%	13.0%	13.0%	12.9%	12.9%	12.9%
HCL Tech		42.0%	35.2%	16.5%	23.6%	31.1%	17.1%	12.9%	14.4%	10.8%	12.2%	13.0%	11.6%	9.4%	8.2%
Tech Mahindra Source: IDC, Nasscom, Deutsche Bank		130.8%	44.2%	5.4%	-0.8%	8.9%	131.7%	6.9%	17.7%	19.4%	25.2%	22.5%	19.4%	12.6%	10.7%





Strategic vendor partnerships

Key highlights

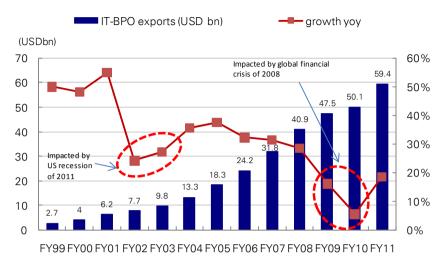
- For the next level of growth, we believe Indian vendors will need to build strategic vendor partnerships with their customers.
- We believe the next leg of growth in mature outsourcers will be driven by share gains in the business spend of the customers, especially in social, mobility and analytics initiatives.
- Strategic vendor status determines the stability and quality of revenues for a vendor.
- TCS ranks the highest on this parameter and is placed among the toptier vendors of most of its large customers.
- Contrary to popular perception, pressure on the overall IT services spending of clients does not necessarily result in a reduction in offshore IT services spend. In most cases it's actually positive for offshore vendors.

Fully integrated delivery models enhance the need for strategic vendor partnerships

Indian vendors used the US recession of 2001 to broaden their geographical exposure and service mix. As a result, after the Global Financial Crisis in 2008-09, though IT service spending improved moderately, top tier Indian vendors were key beneficiaries of vendor consolidation. In FY11, while the industry grew 18.6% yoy, the top four Indian vendors (Infosys, TCS, Wipro and HCL Tech) reported revenue growth of 26% yoy.



Figure 13: IT exports have rebounded strongly after each recession



Source: Nasscom, Deutsche Bank

Figure 14: Indian vendors better placed for market share gains

	Infosys			TCS			Wipro		
	FY01	FY05	FY11	FY01	FY05	FY11	FY01	FY05	FY11
Revenue (USDm)	410	1,593	6,042	678	2,378	8,187	382	1,206	5,221
Revenue from US (USDm)	302	1,038	3,945	451	1,376	4,707	244	787	2,887
US geo revenues	73.5%	65.2%	65.3%	66.5%	57.9%	57.5%	64.0%	65.3%	55.3%
Revenue from Europe (USDm)	77	355	1,302	137	513	2,029	112	359	1,415
Europe geo revenues	18.8%	22.3%	21.6%	20.2%	21.6%	24.8%	29.4%	29.8%	27.1%
Client concentration									
Active clients	273	438	620	NA	621	1034	217	421	904
% revenue from top 5 clients	26.0%	21.2%	15.4%	NA	19.3%	21.4%	30.0%	18.0%	10.9%
% revenue from top 10 clients	39.2%	33.8%	25.7%	NA	30.5%	29.6%	45.0%	30.3%	19.5%
Non ADM Revenue	25.3%	46.9%	61.0%	NA	27.1%	53.5%	8.0%	37.6%	60.5%
Total Employees	9,831	36,750	130,820	NA	45,714	198,614	9,934	41,857	122,385
Attrition	11.2	9.7	17.0	NA	8.0%	14.4%	13.0%	15.0%	14.9%
Revenue per employee (USD)	41,705	43,347	46,186	NA	52,019	41,221	38,454	28,812	42,660
Cost per employee (USD)	24,951	29,148	31,122	NA	34,122	28,853	25,022	20,283	32,950
EBITDA per employee (USD)	16,754	14,199	15,063	NA	17,897	12,367	13,431	8,530	9,711
Contract type									
Fixed price	28.2%	30.0%	40.3%	NA	52.0%	49.4%	16%	22.0%	45.7%
Time and material Source: Deutsche Bank	71.8%	70.0%	59.7%	NA	48.0%	50.6%	84%	78.0%	54.3%

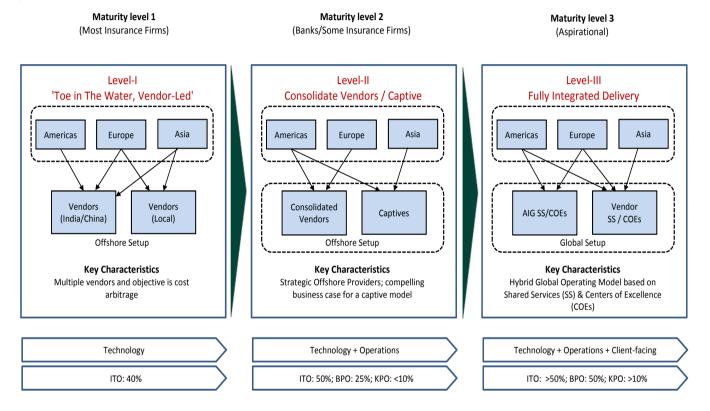
For the next level of growth, we believe Indian vendors need to focus on becoming the strategic vendor partners of their customers. Given the focus on fully integrated delivery models, which include hybrid global operating models based on shared services centres (captives) and Centres of Excellence (captives or vendor facilities dedicated to a particular product or business dimension of the customer), it is increasingly important for vendors to become strategic sourcing partners to win share. We believe the next leg of growth in mature outsourcers will be driven by share gains in the business spend of the customers, especially in social, mobility and analytics initiatives.



Example 1: Changes in the models of engagement of a financial services firm

Buyers, especially in the financial services vertical, are beginning to take a more sophisticated, global and integrated view of their sourcing options (captive, vendor) across their global locations. New regulatory issues are likely to play an increasingly important role going forward. The shift to maturity level 3 (Figure 15) is also important for buyers as it helps them retain the "brains" of their IT and operations within the firm. At many large financial services firms, too many capabilities have been lost to vendors.

Figure 15: Changes in the IT services engagement models of financial services firms

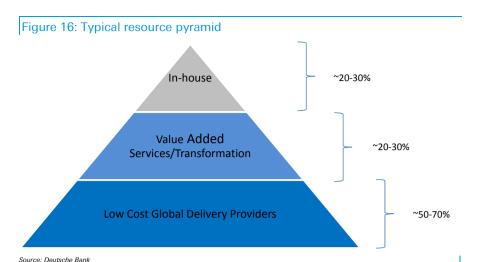


Source: Deutsche Bank

Buyers are also ensuring a healthy balance between procurement and operations. At many large financial services firms procurement has become too powerful, which has resulted in a bias toward short-term results. The ideal corporate sourcing executive is now expected to have a broader experience profile encompassing internal operations, captives and global vendors. Given this, a large company's IT demand can be divided into three broad categories and delivery models.

- 1. In-house This is considered strategic and retained internally. About 20-30% of overall spending is concentrated in this segment.
- Transformation This is considered higher value-add and is currently serviced by consulting+ outsourcing firms like Deloitte, Accenture, etc. This also represents ~20-30% of overall spending.
- Operations This part of the IT spend, which represents ~50-70%, is executed by offshore service providers.





Strategic vendor partnerships provide revenue stability

After the global financial crisis, vendor consolidation and efficiency-driven initiatives have led to shrinkage in vendor lists. Large spenders increasingly prefer vendors who approach the relationship as business partners rather than taking a piecemeal contractual relationship approach. Most successful vendors have achieved strategic vendor status with their key customers by gaining a crucial understanding of a customer's business. Strategic vendor status determines the stability and quality of revenues for a vendor. While TCS scores well on this parameter, the performance of the rest of the Indian vendors has been below expectations. Infosys in particular has lost its strategic vendor status with most of its top customers over the past few years. Winning back this status will be key to Infosys's success in the future.

TCS	FY08	FY09	FY10	FY11	FY12	FY13	FY14	5yr CAGR	3yr CAGR
	F100	F109	F110	FILL	FTIZ	FIIS	F114	Syl CAGN	Syl CAGN
Revenue wise no. of clients									
<1mn USD	571	609	625	576	554	518	NA		
1-5mn USD	215	233	226	250	277	348	360	9.1%	7.6%
5-10mn USD	43	61	65	65	75	79	123	15.1%	13.6%
10-20mn USD	44	49	55	62	71	90	95	14.2%	8.9%
20-50mn USD	37	38	40	54	56	69	83	16.9%	9.0%
50-100mn USD	12	17	16	19	29	35	29	11.3%	8.8%
100mn USD+	7	7	7	8	14	17	24	27.9%	24.6%
Client concentration (USDm)									
Top clients	370	283	520	606	692	706	NA		
Top 2-5 clients	706	836	862	1,146	1,261	1,354	NA		
Top 5-10 clients	581	499	532	671	804	856	NA		
Non-top 10 clients Source: Company data, Deutsche Bank	4,040	4,397	4,425	5,763	7,415	8,654	NA		



Figure 18: Trend in Infosys'	client tiering	hy reve	1110						
,									
Infosys	FY08	FY09	FY10	FY11	FY12	FY13	FY14	5yr CAGR	3yr CAGR
Revenue wise no. of clients									
<1mn USD	228	252	237	254	295	350	389	9.1%	8.9%
1-5mn USD	169	176	179	179	209	235	269	8.9%	8.5%
5-10mn USD	52	50	62	61	58	76	84	10.9%	6.6%
10-20mn USD	42	42	38	53	53	57	57	6.3%	1.5%
20-50mn USD	29	39	33	45	39	40	49	4.7%	1.7%
50-100mn USD	12	16	20	17	27	28	29	12.6%	11.3%
100mn USD+	6	4	6	11	13	12	13	26.6%	3.4%
Client concentration (USDm)									
Top clients	380	322	221	284	301	281	313	-0.5%	2.0%
Top 2-5 clients	493	518	567	646	783	843	874	11.1%	6.2%
Top 5-10 clients	438	452	471	622	636	695	775	11.4%	4.5%
Non-top 10 clients Source: Deutsche Bank	2,864	3,371	3,545	4,488	5,273	5,578	6,286	13.3%	7.0%

Vendors need to take a long-term view of the relationship

Our recent conversations with key IT decision makers at over 40 large customers of the Indian vendors lead us to believe that customers look for the following qualities in a strategic vendor:

- Mutual understanding of how to make a long-term relationship beneficial for both sides
 - Both sides must be prepared for 'give and take'
 - Vendors must be willing to go the extra mile and put more skin in the game
- Vendors must understand and be responsive to the changing regulatory environment
- Vendors must have the ability to adapt to rapid change
 - Ramp-up speed, flexibility, organisationally and culturally responsive
- Vendors must have the capability to be a transformational partner and know how to quantify the value of transformation – just using it as a buzzword is a recipe for failure
- Vendors must have good communication capabilities and focus on value creation for the customer
- Vendors need to demonstrate investment and skill development to move up the value chain
 - The main reasons for limited success in moving up the value chain:
- Lack of deep enough understanding of the business of the clients
 - Vendors not investing enough in thought leadership
 - Fault also lies with the buyers operations and IT are not aligned (don't talk enough) and don't pass on the information to their vendors



- Vendors need to put skin in the game
 - Not enough attention paid to productivity
 - Clients want to focus on output-related metrics, vendors on headcount
- Vendors need to invest in developing their employees
 - Middle management still weak significant problem as middle management encompasses probably 200,000 full time employees
 - Vendors losing customer intimacy due to their growing size
- CEO location not the main driver of customer intimacy, but rather organisational culture and initiatives undertaken to develop a greater organisational sense of intimacy

TCS ranks highest on these parameters and is among the top-tier vendors of most of its large customers. It has benefited from the vendor consolidation exercises at most of these customers. Some of its key success factors are as follows:

- 1. Geographically distributed global delivery centres.
- Strong and longstanding relationships between business relationship
 managers (BRMs) and clients' Vendor Management Officers (VMOs).
 The reorganisations at Infosys and Wipro have hurt the companies on
 this parameter.
- Very high CEO-level engagement. Personal interest taken by Chandra in each engagement by large or potentially large customers. Consistent and stable second-level leadership (unlike Infosys/Wipro) has also helped.
- 4. Client mining has improved significantly over the past five years.

Increase in share of globally delivered services

Contrary to popular perception, pressure on clients' overall IT services spending does not necessarily mean cuts in offshore IT services spending. In most cases, cuts are actually positive for offshore vendors. Our channel checks suggest that at most large customers, the share of offshore/nearshore delivered services has more than doubled over the last decade. We illustrate this with the example of a global automotive company.

As shown in Figure 19, with revenue shrinkage over 2006-2013 there was a cut in the overall IT budget (-6.2% CAGR), with IT spending as a proportion of revenue dropping from 1.7% to 1.1%. However, global services spending over the same period increased at a 3.8% CAGR, with the proportion of global delivery rising from 21% of overall IT spend in 2006 to 42% in 2013. We expect this to increase to 70% in the years to come.



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	•		
	USDbn	2006	2013
Α	Revenue	150	145
В	IT spend	2.5	1.6
C=B/A	IT spend as a proportion of revenues	1.7%	1.1%
D= B(2013-2006)	Reduction in IT spend		0.9
E	Global services spend	0.512	0.664
F=E/B	Share of global services	20.5%	41.5%
G= E (2013/2006)	CAGR in global shared services spend (2006-2013)		3.8%
Н	Spend on new and innovative solutions	0.435	0.518
I=H/B	Share of new and innovative solutions	17.4%	32.4%
J= H(2013/2006)	CAGR in new and innovative solutions spend (2006-2013)		2.5%
Source: Deutsche Bank			

- With an improvement in the macroeconomic environment, demand for IT is growing.
- Digitisation and "internet-of-things" is driving demand, with the company establishing a separate unit for digital technologies.
- The rise in demand is unlikely to be met by captives and/or temporary/contract staff, i.e. there will be more work for certain vendors offering ODCs (offshore delivery centres) – although captive is also being upgraded to be a talent-pool and to take selective global leadership.
- The customer is hence adding suppliers/vendors. Suppliers are segmented by differentiated and non-differentiated content – differentiated work will be done internally.
- The two key areas of spending:
 - Big generational bets like J2EE, Siebel, etc, which are expected to last 20-30 years
 - o Cyclical short-term trends

TCS far ahead of the rest on this parameter

In summary, while the share of globally delivered services is increasing, Indian vendors need to achieve strategic vendor status with most of their top customers to not only gain share but also move up the value chain in terms of the quality of services offered. This will entail taking a long-term view of the client relationships and a business partnership approach to account management. Our extensive channel checks suggest that TCS is far ahead of the rest on this parameter. Infosys and Wipro continue to struggle given changes in the organisation and management structures and high attrition rates in customer-facing personnel. Tech Mahindra has done well on account management but still lacks scale to make a significant impact with its enterprise customers.



Geographical diversification is imperative

Key highlights

- Though the US and UK contribute <50% of the worldwide enterprise IT services spend, they account for >75% of the revenues of the Indian IT service sector.
- Among the top five enterprise IT service spending countries (the US, Japan, UK, Germany and France), the Indian IT services sector has double-digit penetration only in the US and UK.
- Indian vendors have focused on investment in local leadership and strategic acquisitions to improve their share in France and Germany.
- Growth through acquisition or joint venture (JV) is the right model for improving penetration in the Japanese market.
- TCS's proactive investments in France, Germany and Japan will help it maintain its leadership.

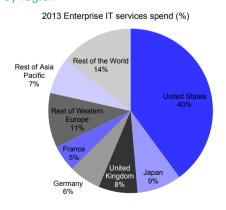
Key growth markets: Germany, France and Japan

Given the large revenue base, Indian vendors need to diversify geographically to sustain high growth rates and counter any revenue cannibalisation effects of SMAC.

US and UK account for >75% of the revenues of most Indian vendors

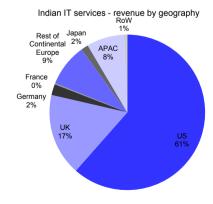
The Indian IT services industry still derives a majority of its revenues from the Anglo Saxon markets. Though the US and UK contribute <50% of the worldwide enterprise IT services spend, they account for >75% of the revenues of the Indian IT service sector (Figure 20 and Figure 21). Consequently, amongst the top five enterprise IT service spending countries, the Indian IT services sector has double-digit penetration only in the US and UK (Figure 23).

Figure 20: 2013 Worldwide Enterprise IT services revenue by region



Source: IDC

Figure 21: 2013 Indian IT services exports by region



Source: Nasscom, Deutsche Bank



Figure 22: 2013 Enterprise IT services spending by geography

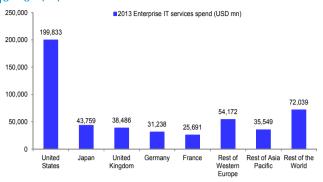
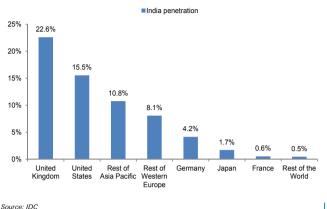


Figure 23: India penetration of Enterprise IT service spending by geography



Source: IDC

Given the penetration mismatch and the relative size of the top tier Indian vendors, most Indian vendors are investing in three key markets: Germany, France and Japan.

Figure 24: State of the market and investments made by the Indian vendors in Europe

Comments made by the Indian vendors

- Europe is still much smaller when compared to North America. Gained critical mass not only in Europe as a whole but even in individual markets like the Nordics, Benelux, Switzerland, Germany and France. Expects Europe to grow faster.
- Has been consistently ranked #1 in the European Customer Survey in different segments over the past three years. In 2013 TCS was ranked #1 in every market in Europe in which it operates.
- TCS's presence in the European market in different sub-segments is scaling up so it is able to bid for more opportunities. The addressable market and ability to participate and win clients and enter into very large European clients is increasing.
- Will look for inorganic growth opportunities in Europe
- Increased sales focus in the two large markets within Europe: France and Germany
- Majority of the large deal pipeline continues to be around the restructuring of existing IT spend for clients
- Client spending in Europe is stable. Spend is more on the consolidation and renewal of old contracts. The deal pipeline is better in Europe, especially in infrastructure deals.

• Seeing good traction in Global Infrastructure Service and a revival of demand in the applications business. Proactive investments

- Sees more investment going into Europe as markets are deregulated
- Investing in Continental Europe. Local leadership established. From that point of view, it is investing for the future in all new geographies where it is underpenetrated.
- in Continental Europe are showing early signs of success in terms of deal wins.

 As far as Europe is concerned, SMAC technologies are picking up, but not at the rate seen in the US
- Pipeline continues to be very strong and the company remains extremely bullish on this market
- In Europe its clients remain under cost pressure, so there is huge cost reorganisation being undertaken.
- European pharma is opening up to global outsourcing (due to patent cliff issues).
- European market from an outsourcing perspective is more recent versus North America, which has been outsourcing for 20 years. So, to that extent, some of the construct of the deals that have happened in Europe is different from that in North America.
- Seeing very positive traction in Germany and the Nordics region.
- Has introduced a new team in Continental Europe. New country managers in a number of countries, including Denmark, Sweden and France, and has also announced a new leader for all Continental European business.
- Leveraging acquisition of six companies in the C1 Group and Equinox Consulting to compete in large deals in Germany and France. Has jointly won several new logos and expanded capabilities
- Equinox in France and C1 in Germany have helped expand local presence in each of these countries
- As the macro environment in many European countries continues to be challenging, customers are showing increased appetite to move more work to a global delivery model.
- Remains optimistic on long-term growth prospects in Europe, due to investment in local leadership and broad range of capabilities
- European companies are focussing more on cost containment and driving greater efficiencies

Source: Company data

TCS

Infosys

Wipro



HCL Tech

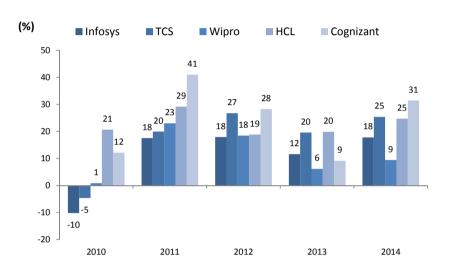
Tech Mahindra



Indian vendors investing in Europe for the long term

Indian vendors used the last downturn as an opportunity to set their houses in order in continental Europe. Most vendors are expanding their presence in the French and German markets by making changes to their strategies and delivery mechanisms. This is important since in terms of the size of opportunity, the French and German markets are 1.5 times larger than the UK's.

Figure 25: Europe revenue growth for top tier Indian vendors



Source: Company data

German market – Structural impediments but improving prospects

Europe's largest economy, Germany, ranks second behind the UK among the European nations for most IT spending. Industry specialists believe that besides the language barrier and other cultural issues, solid labour laws and powerful labour unions make it difficult to outsource. Despite all the issues identified above, more German companies are slowly starting to use offshore services, recognising their strategic significance. Indeed, several large German corporations (Bosch, Siemens, SAP, etc) are long-time global leaders in the use of offshore services. In time, more companies can be expected to pursue larger-scale offshore strategies.

Unlike the US, where financial services companies dominate IT spending, in Germany manufacturing is the leader in terms of IT usage, accounting for more than a quarter of spending. In addition, roughly 60% of the IT service spend from this region is mostly on project-based services like package implementation, custom application development, system integration, technology consulting, etc. The proportion of global IT services spend on these services is 34%. The skew in favour of higher value-add services makes investment in the German market value accretive.

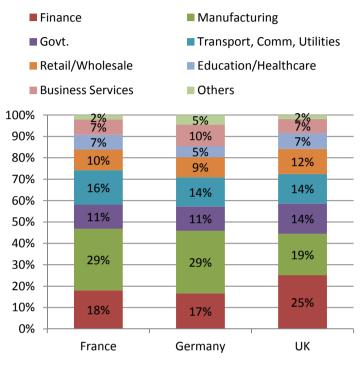
French market - About 80% of the IT service work is outsourced onshore

France is the third-largest IT services market in the EU behind the UK and Germany. Industry specialists note that the French IT services market is



dominated by global service providers, which account for nearly 60% of the market. However, France is the only European country where domestic companies have maintained a significant market share. About 80% of IT service work is outsourced onshore, 15% nearshore and just 5% offshore.

Figure 26: 2014 IT spending breakdown by vertical



Source: IDC estimates

To address their low penetration in both France and Germany, Indian vendors have made some structural changes in their operating models. The following are some noteworthy changes.

- 1. Appointment of local heads in Europe.
- 2. Special delivery strategies and client engagement models for France and Germany. Many companies are attempting to move away from the 30:70 onsite offshore ratio. While some (such as Infosys) seek to add more local headcount with a 20:20:60 local, onsite and offshore model, others (such as Cognizant) look to alter the delivery model by adding nearshore to the 'plain vanilla' onsite/offshore delivery. Wipro, on the other hand, is positioning itself as a hybrid of the Infosys and Cognizant delivery models.
- Since Indian vendors have a sizable presence in all key service lines and have achieved scale, they are looking to make integrated offerings with consulting and package implementation, infrastructure management and BPO to win large deals.
- Indian vendors are increasingly adopting the inorganic growth route with a clear focus on acquiring capabilities in continental Europe.



Figure 27: Hea	eds of busines	s in kev	Continental	Furopean	countries
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Country Heads	Infosys	TCS	Wipro	HCL Tech	Tech Mahindra	Cognizant
Germany	Mr. Franz-Josef Schuermann	Mr. Sapthagiri Chapalapalli				Mr. Dieter Berz
France	Eric Laffargue	Mr. M. Kumar Narayanan	Hervé Sortais			Mr. Olivier Cavrel
Europe			Mr. Ulrich Meister heads Continental Europe & Africa	Ashish Gupta - Head of EMEA	Mr. Rajesh Chandiramani (Head of sales for Continental Europe)	
Japan	Mr. V. Sriram	Mr. A S Lakshminarayanan	Mr. Manoj Nagpaul heads Asia-Pac and Japan	NA	NA	Mr. Tomoaki Takeuchi

Source: Company data, Deutsche Bank

Cognizant 2010 Three acquisitions USD 46mn U.K. These transactions expand our business process outsour expertise within our logistic services, strengthen our transformation and program management capabilities a our testing services within Europe. Cognizant 2012 6 companies of C1 Group, Germany/Switz This transaction expanded our local presence in Germany Switzerland and deepened our expertise in enterprise and services and high-end testing services. Cognizant 2013 Equinox Consulting SAS N/A France In addition to expanding our presence in Europe, this transformation our financial services management and reconsulting practice. Cognizant 2013 Valuesource SA N/A Belgium Cognizant 2014 Cadient Group HCL Tech 2008 HCL Insurance BPO Services USD3.6 U.K. The company believed that the acquisition would help in value-based back office services to its customers in the vertical. HCL Tech 2018 Axon Group Ltd USD731.1 U.K. The acquisition of Axon strengthens the Group's position significant player in SAP implementation and consultant that the acquisition of Axon strengthens the Group's position significant player in SAP implementation and consultant procurement business in Poland, Thailand and India Infosys 2007 3 back-office service certices USD3.0 Netherlands and process optimisation as well as IT transformation. TCS 2006 75% stake in TKS-Teknosoft SA Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA USD6.7 Systake in TKS-Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA USD6.6 Switzerland TKS-Teknosoft SA USD6.6 Switzerla	Acquiring Company	Year	Target Name	Value	Target Country	Comments
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Japan - new frontier for Indian IT

Japan spends USD44bn on enterprise IT services, second only to the US

In our note titled "Customer interactions back our thesis; TCS and TechM remain best plays" dated 9 December 2013, we highlighted the importance of Japan as the next frontier for the Indian IT service companies.

Figure 29: Japan - Proportion of IT services spend by service line

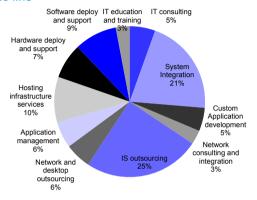
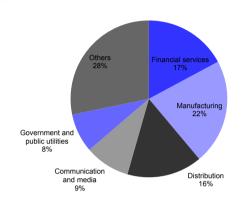


Figure 30: Japan - Proportion of IT services spending by vertical



Source: IDC

Source: IDC

Several challenges in accessing the Japanese market

Despite the Indian IT services industry's presence in Japan since the mid–90s, growth has been limited. Japan spends USD44bn on IT services, second only to the US in terms of size. Japan could open the doors for offshoring, as corporations there need to cut costs and run lean operations. However, the Japanese are culturally different and have different business practices to the West – not to mention the language barriers. These challenges need to be addressed effectively to gain ground in this market (see Figure 31). In this context we believe TCS has the right onshore capability with the addition of ~1,600 IT staff (plus business associates) from Mitsubishi's IT Frontier Corporation.

Figure 31: Challenges in the Japanese market

Offshore IT vendors expect

Precise, stable requirements

Early involvement in design

Precise contracts

Global expertise as a selling point

Domain knowledge acquisition

Rapid decisions from client liaisons

Full responsibility of outsourced projects

Value-add and cost saving motivations
Source: Company data, Deutsche Bank

Japanese reality

Volatile requirements

Late involvement after design completion

Informal circles of trust run with handshakes

Demonstration of technical capability

Domain knowledge protection

Group consensus driven decisions

Modular pieces of large projects

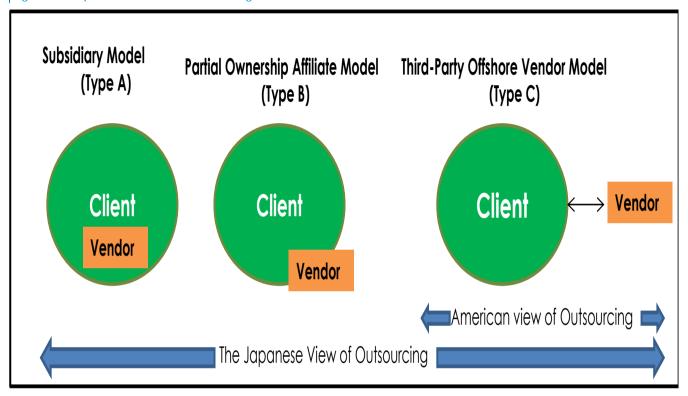
Technical expertise access motivations

Figure 32 shows that Japanese companies have predominantly relied on the captive or JV model for offshore delivery. Unlike the West, they have used third-party vendors sparingly for strategic engagements. Our channel checks suggest growth through the acquisition or JV route is the right model for improving penetration in the Japanese market. IBM and Accenture have



leveraged acquisitions well to penetrate this market. In this context, TCS's Mitsubishi JV and then the subsequent consolidation of its presence in Japan through the acquisition are a well-timed move and a step in the right direction, in our view.

Figure 32: Japanese models of outsourcing



Source: Company data, Deutsche Bank

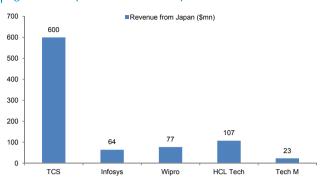
Japanese captives in India are at a crucial inflection point

Several Japanese corporations such as Toshiba, Yokogawa, Sony, Canon, Yamaha, Honda, Sanyo, NTT Communications, Nissan, Komatsu and Suzuki have captives in India. Japanese organisations are increasing the size and maturity of their India centres. These captives are at a crucial inflection point, based on a fresh outlook towards growth and globalisation. The captives' operations revolve around the following two areas:

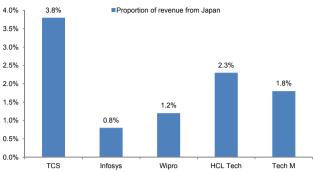
- Core development work is done by captives
- All commoditised activities are outsourced to vendors managed by captives



Figure 33: Japan revenues of top tier Indian vendors







Source: Company data, IDC, Deutsche Bank

Source: Company data, IDC, Deutsche Bank

Figure 35: Indian	Figure 35: Indian vendors' presence in Japan										
Particulars	TCS	Infosys	Wipro	Tech Mahindra	HCL Tech	Cognizant					
Presence since	1987, and JV with Mitsubishi in 2012	NA	1998	2013	NA	2010					
Service offerings	and infrastructure services	Packaged Applications (60% of IT revenue), Engineering (20%), BPO (20%). It also offers postimplementation operation outsourcing services.		Telecom related engineering services (40% of revenue). Other IT services (60% of revenue) include ERP implementation, applications management services	Engineering services (80% of revenue), 20% from other IT services (mainly from packaged application and implementation)	IT Development (50% of revenue), Operations (30%), BPO (20%)					
Employee strength	2,400 in Japan, 1700 offshore	250 in Japan, 1,000 offshore	500 in Japan, 1,100 offshore	150 in Japan, 900 offshore (600 in China, and 300 in India)	300 in Japan, 2,000 offshore (mostly India)	160 in Japan, 700 offshore					
Customer profile	Infrastructure and Financial	Manufacturing (70%). Remaining are mostly financial services, retail, and communications	Manufacturing, Pharmaceuticals and Financial Services. Smaller number of customers from retail, transportation, and customer goods and communications	Manufacturing, Pharmaceutical, Communication and Financial Services	Manufacturing, Financial Institutions, Transportation	Mainly Financial Institutions (particularly insurance companies) and Pharmaceuticals					
Strategy and Future focus	needs of Japanese customers through enhanced solutions and service offerings with the help of a nearshore delivery centre and leveraging Mitsubishi's significant domestic market expertise as well as the processes and best practices of TCS's Global Network Delivery Model.	Its effort to increase contracts with global rollout will further expand the revenue share of its packaged application services. In Engineering services, it is inclined to increase its use of offshore resources for design functions.		customers in the financia services, manufacturing, communications, and airline industries, where i sees opportunities in application migration to	platform development and tests. This will benefit HCL	pharmaceutical companies. It recognises the growing level of interest in SMAC services, where it plans increasing					
Source: IDC, Company data, Deu	tscne Bank										





TCS's proactive investments in France, Germany and Japan will help it maintain its leadership

We like TCS's strategy of proactively investing in markets with low offshore penetration. In our view, its strong presence in Continental Europe and early investment in Japan will help it diversify its revenue base. We expect TCS's FY20 revenue contribution from the Americas, Europe and Asia Pacific to be 44:37:19 vs. the current 53:29:18.

We see Infosys' high exposure to North America (61% vs. 53% for TCS) and inferior positioning in growth markets like Germany, France and Japan as a key negative. In our view, Infosys will have to accelerate its investments and penetration of the new growth markets to maintain healthy revenue growth over the long term. We expect its revenue contribution from North America, Europe and Asia to change from 61:24:15 in FY14 to 55:28:17 in FY20E.

Over the past two years. Wipro has been unable to capitalise on the opportunity from the surge in offshore IT service adoption by Continental European customers. Though it has been present in Japan for some time, its positioning in the market remains weak (Figure 35). Given this backdrop, we expect Wipro's geographical revenue contribution from the Americas, Europe and Asia Pacific to be 43:31:26 in FY20E vs. the current 50:29:21.

HCL Tech has a strong presence in Europe. This is mostly due to its dominant positioning in IMS, which was the key spending area for outsourcers from Europe looking to cut costs and drive efficiency. We believe that its weakness in software and services (60% of revenues) and BPO (5% of revenues) will limit any further upside for HCL Tech, not only in penetrating Europe further but also diversifying its geographical exposure. We thus expect HCL Tech's FY20E revenue contribution from North America, Europe and Asia to be 54:37:9 versus the current 54:34:12.

We believe a robust balance sheet, competitive pricing and expanding service footprint by leveraging Satyam's relationships should help Tech Mahindra gain share versus its peers. Thus, in contrast to other large cap peers, we expect Tech Mahindra's revenue contribution from North America to improve. We thus expect its FY20E USD revenue contribution from North America, Europe and Asia to be 46:35:19 versus the current 45:32:23.



Digital technologies – threat or opportunity?

Key highlights

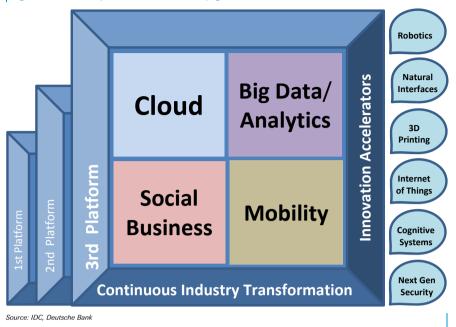
- While overall IT spend (includes hardware, software and services) will likely be flat to down, we expect the spend mix to change in favour of services.
- Spend on cloud computing could be deflationary for existing spend on IMS
 as intense price competition and consolidation will put pressure on laaS
 (infrastructure as a service) price points. This will be particularly negative
 for HCL Tech.
- Spend on social, mobility and analytics will increase IT service spend, as will new application development and SaaS (software as a service) customisation for cloud delivery. This will provide growth opportunities for vendors that have a diversified service presence and enjoy strategic vendor status with their top customers. We expect TCS to be a prime beneficiary of this trend.
- IDC expects public IT cloud services spending to reach ~USD127bn in 2018. It forecasts a 23% CAGR over 2013-2018 versus a 3.6% CAGR in overall IT spend over the same period.
- A large part of the IT outsourcing and support services for years to come will still be concerned with "keeping the lights on" by maintaining and updating the legacy application environments. IDC forecasts, public IT cloud services will drive nearly 16% of the ~USD786bn IT services spending and will account for 96% of overall growth.

Decadal shift underway

IT services is in the midst of a massive structural shift from the PC and client/server-based second platform of technology growth and innovation to what IDC calls the third platform, built on a foundation of mobile, social, big data and cloud technologies.



Figure 36: Third platform of industry growth and transformation



Even as its importance declines over the years, a large part of the IT outsourcing and support services for years to come will still be concerned with "keeping the lights on" by maintaining and updating the legacy application environments of the clients (first and second platform technologies). However, IDC estimates that over the next two decades, business innovation will be based on the third platform as millions of high-value, industry-transforming solutions and services will be built on the new platform. Third platform technologies, services and solutions will account for over 100% of all IT spending growth from 2013 to 2020.

Figure 37: One sixth of overall IT services spend in 2018 will be on public IT cloud services

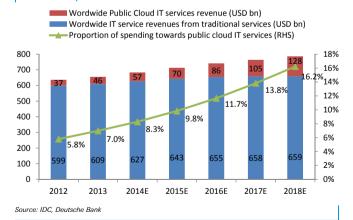
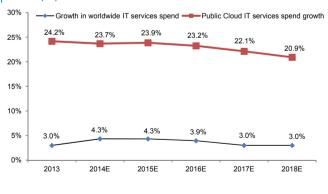


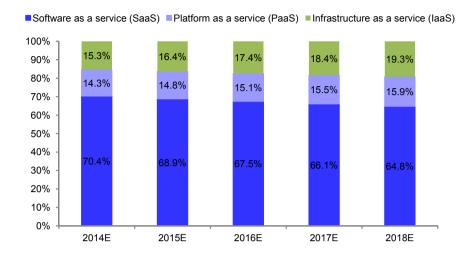
Figure 38: Public cloud IT services spend is likely to grow >20% yoy



IDC expects public IT cloud services spending to reach ~USD127bn in 2018. It forecasts a 23% CAGR over 2013-18, versus 3.6% in overall IT spend. Public IT cloud services will drive nearly 16% of the ~USD786bn IT services spending and will account for 96% of overall growth.



Figure 39: SaaS will dominate cloud services spending



Source: IDC, Deutsche Bank

SaaS to account for over 60% of the spend

Software as a service (SaaS) will account for 70% of 2014 cloud services spending and will continue to dominate public IT cloud services spending since most customer demand is at the application level. Platform as a service (PaaS) and cloud storage services will be the fastest-growing categories, driven by robust growth in developer cloud services adoption and big data-driven solutions, respectively. Infrastructure as a service (IaaS) will remain the second-largest IT cloud services category. However, intense price competition and consolidation will put pressure on IaaS price points.

Figure 40: Proportion of Public IT Cloud services spend by region

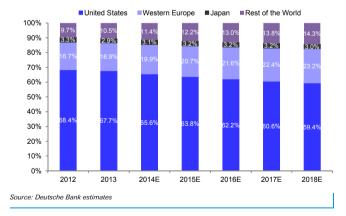


Figure 41: Rapid cloud adoption in US



US will be the largest spender on cloud services

As with most IT adoption trends, the United States will be the largest spender on cloud services and will account for ~60% of IT cloud services spending in 2018 (according to IDC). Western Europe will be a distant second with a share of 23% in 2018. The rest of the world (including Japan) will account for only 17% of the overall spending. More importantly, ~27% of the overall IT services spending from North America in 2018 will be on public IT cloud services, compared to a dismal 12% for Western Europe and 4% for Japan.



Four critical implications of cloud adoption for traditional IT service vendors

The new wave of core technologies or innovation accelerators includes the Internet of Things, cognitive systems, 3D printing, robotics, natural interfaces and nextgen security. Big data, mobile and social technologies and solutions are all heavily dependent on the cloud services delivery model.

In 2014 we have entered the innovation stage, which will result in an explosion of new solutions and platforms and products. For traditional IT service vendors, there are four critical implications.

- Cloud services will become more strategic than traditional IT as nearly every enterprise will become a provider of cloud-based services within its own industry. Cloud services will move beyond just operating IT efficiently to determining how the buyer competes in its own industry.
- There will be a tremendous increase in the number of cloud-based applications over the next five years as cloud services expand beyond traditional IT to business.
- Line-of-business executives (and their budgets) will become much more involved in IT cloud services decisions and investments, as cloud becomes part of their businesses' "operational technology" (i.e., how their offerings reach the market).
- 4. IT vendors may see significant demand for their industry offerings as cloud service providers "bundle" underlying IT within higher-level business services. IT vendors must hence develop strong customerpartner relationships with these industry cloud/platform players.

Rapid growth in cloud professional services

As cloud adoption and evaluation gathers steam, we expect drastic shifts in project-based services. Our channel checks suggest that most organisations are still firmly in the assessment, design and build stage of the cloud migration. This will drive a lot of demand for cloud-related professional services, which can be met by the IT service vendors.

What are cloud professional services?

Cloud professional services are primarily project-based services that assist customers with planning and implementing a cloud services strategy, which involves deciding how to adopt the use of public clouds, deciding to build and implement private clouds, or deciding to use a hybrid of public and private clouds.

Cloud professional services may include such services as assessments and road map development, workshops and accelerators, the implementation of pilot programmes or other deployments, and proof of concept. It may also include assistance in the implementation or adoption of cloud services such as software as a service (SaaS), infrastructure as a service (IaaS), or platform as a service (PaaS) as well as the integration of these services into the customer's IT environment (whether cloud-related or not). Customer spending on cloud professional services is a subset of spending in the project-based markets.



28% CAGR in cloud professional services spending over 2013-18

Based on IDC forecasts, demand for cloud-related professional services was USD11.6bn in 2013 (5.1% of overall project-based services spend). IDC forecasts a 28% CAGR over 2013-18 vs. overall IT services spend growth of 3.7% over the same period.

Figure 42: Spending on cloud professional services to register 28% CAGR over 2013-18

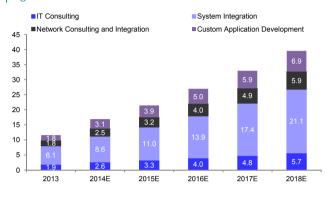
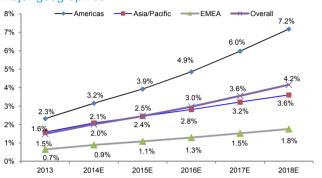


Figure 43: Penetration of cloud professional services in major geographies



Source: IDC, Deutsche Bank

Source: IDC, Deutsche Bank

Large global financial services firm allocates EUR500m for private cloud adoption

The following example clearly demonstrates that most large organisations, while serious about cloud adoption, are unsure about its execution and use. This is hugely positive for professional could service providers.

A large financial services company in Europe is seriously considering cloud adoption. The company has a large transformation programme with a budget of EUR500mn for spending through 2020. This will be self funded to the extent of 30-40%. EUR300m of this will be funded from the IT budget, while the business budget will fund EUR200m. The company expects payback to start from 2017 with a reduction in the 'keep the lights on' cost. The programme would involve a lot of IT automation and service-oriented application methodology. The customer plans to reinvest most of the savings back into IT service for business functions.

Some of the other important aspects of the transformation are as follows:

- The work required preparing and shifting processes to the cloud will benefit the offshore vendors – once the shift is completed, demand for traditional IT services will probably decline
- The pricing model of the private cloud is undefined and complex
 - None of the vendors really know how to offer and price cloudbased services
 - The user does not really come to know how the services are delivered "black box" however; this is of little concern to the buyer. The user see could-based services offering more flexibility, better customer-orientation, and productivity gains from re-use.



- Since it is the outcome that matters, it is difficult to determine the constituents of the solution and how the service is charged.
- For example do you know (or care) where your storage is coming from?
 - Pricing models for cloud are therefore not very well developed.
 - Not many comparable models are available.

Still scope for traditional IT service vendors to gain share

A key aspect of the cloud proposition is to make IT simple: standardized, easy to deploy, and owned by service providers, not by users (i.e., the whole market for implementation and customization as well as outsourcing/managed services could potentially die out). This is not going to happen any time soon, as the forecasts suggest (see Figure 37). Traditional IT service providers are in an interesting position because cloud is highly disruptive to their traditional revenue streams and market position. However, market changes have in reality played out differently:

- Public cloud has too many practical issues, such as security, availability, performance, data location, ability to audit and meet compliance requirements and lock-in. In addition, pay-as-you-go (telco- or utility-based billing models) is not necessarily compatible with all models of IT operation. This has resulted in slow migration versus what was originally believed.
- Private cloud has emerged as an intermediate form with some of the benefits of the public could but with none of the abovementioned flaws. Note that, even in the abovementioned example, the large global financial services firm chose to implement a private cloud. This is a long-term positive for traditional vendors, as it requires consulting, implementation, migration, support, and management. Private cloud can be seen as an extension of traditional IT and not the paradigm shift (or the transition to IT as a service) that the public cloud represents.

Digital technology adaption is an opportunity

As such, cloud represents both an opportunity and a threat to service companies, particularly those with strong outsourcing activities. Our channel checks suggest that, as of now, clients have focused on virtualisation of the infrastructure and that service providers have benefitted from these opportunities. We believe buyers will now seek business value. One of the potential benefits includes the delivery of consistent, predictable high-quality software using a virtualised shared infrastructure.

Our channel checks suggest that, although the spending on digital – SMAC (Social, mobility, analytics and cloud) – is small, many global organizations, especially in the financial services vertical, have established dedicated teams/groups to lead their digital initiatives. Use of niche vendors will grow in newer areas like SMAC. Spending on cloud in particular is likely to rise over the next two years with priority for non-regulatory parts of the business.



Vendor offerings currently are clearly premature. Cloud adoption will be driven by customers, but new management and organizational capabilities are needed. Currently, most buyers lack the maturity to manage BPAS. Many large customers believe that they cannot move to an API format immediately and are evaluating cloud adoption on an application-by-application basis. While new applications are likely to move to the cloud model, legacy applications are difficult to move. Customers report ~70% savings in maintenance costs for apps that have moved to the cloud. CIOs are keen to move applications to the cloud as fast as possible following a strategy of cautious steps. There is a big push to 'sunset' legacy applications and migrate new applications – driving a surge in work that will subside once completed. However, security remains the key risk. Most customers indicated that they would not like to be in the press for the wrong reasons.

TCS – targets evolutionary transformation and innovation

Strategy – Focus on business transformation

- TCS targets both aspects of cloud:
 - the evolutionary transformation of IT to cloud
 - disruptive innovation of the business
- While large-scale transformation of existing IT infrastructure is gaining a lot of attention, TCS believes that the real benefit will be driven by business transformation. Hence, it focuses on automation of business processes and is building tools to address this change.

Portfolio: Good breadth of cloud and professional services

- End-to-end cloud professional services: Given TCS's strategic vendor status with most of its top customers, it is ideally positioned to provide cloud professional services. This includes analysis of the business needs, IT landscape, and creation of a road map and design plan.
- 2. Cloud-based applications: These will be based on TCS's intellectual property, such as BaNCS, F&A, HR, procurement, and analytics solutions. The software is offered either on a license basis for implementation in private clouds (or on traditional IT infrastructure) or as a service (SaaS) model from hosted private clouds. TCS is not planning to migrate to multitenant environments in the near future.
- Cloud hosting services: These will be provided either through partners or from TCS's own datacentres.
- Infrastructure management and cloud integration: Its Integrated Command Center (ICC) is integrated with BMC and Tibco service management solutions. It offers managed services for traditional and cloud environments.
- iON SMB-in-a-box SaaS: This is to support all necessary business processes in a small company. This is currently offered in India and is under consideration for launch globally.

Positioning - To become a preferred business transformation partner

For the long term, TCS positions itself as a business expert in cloud services. Accordingly, its messaging is centred on business transformation. It aims to leverage its industry-specific solutions (solutions that will be developed into BPaaS offerings) provided with BPO services on top.



Transforming existing IT and becoming a strategic vendor to its customers is high on the agenda in achievement of the long-term objective. Its offshore strength and service automation enables it to be very cost competitive.

Outlook: Short-term challenge of bridging the perception gap

- TCS's strategy of focusing on business transformation and innovation will help it gain share in cloud in the long term, as it is combined with a more pragmatic focus on shorter-term transformation of the traditional IT.
- 2. Bridging the gap between its large infrastructure play and offering business solutions via cloud is its key short-term challenge.

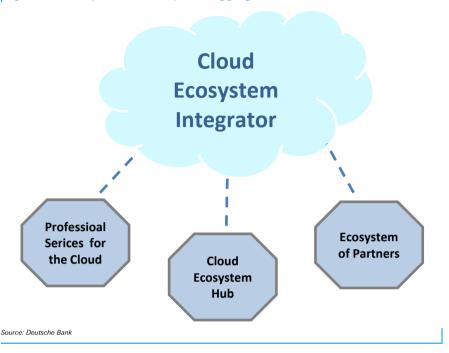
Infosys – Cloud Ecosystem Hub to build and manage cloud environments

Strategy - Aspires to become a Cloud Ecosystem Integrator

- Infosys aspires to be a "Cloud Ecosystem Integrator" helping its large global customers implement and manage an enterprise-specific cloud ecosystem.
- It acts as a strategic partner, helping clients take advantage of cloudbased solutions. This includes:
 - Enabling business agility
 - Helping clients respond to business needs faster
 - Managing complexity of change and operations by having a single point of accountability for all cloud-related needs
 - Transition to a "Service oriented" IT organization by transitioning from "asset focused" to "service oriented" IT management



Figure 44: Infosys: Cloud Ecosystem Aggregator



Portfolio – Cloud Ecosystem Hub to build and manage cloud environments

Its Cloud Ecosystem Hub solution helps clients build, manage, and operate a unified hybrid cloud environment. Infosys Edge cloud business platform can be used by the clients for their business needs.

Positioning – Emphasis on strategic partnerships

Infosys works with 35+ partners, including strategic cloud partners. It brings deep expertise and industry partnerships with over 35 leading industry partners helping clients successfully navigate their cloud journey. Its value proposition to clients is to help them realize measurable business outcome by accelerating their cloud adoption.

Outlook - Need to demonstrate industry insights and competence

- Infosys is most strong in the areas of:
 - Project value propositions to clients
 - Onshore/offshore mix optimization
 - Providing technical insights and competence
- It can further enhance its position by improving:
 - Presence of local offices and local resources
 - Providing functional insights and competence
 - Providing industry insights and competence

Wipro - Emphasis on integrated cloud services practice

Strategy

 Wipro aims to transform business processes through advanced technologies like cloud, mobility, analytics, social, and smart sensor technologies to create a seamless end-customer experience.



Its Integrated Cloud Services practice, created in 2010, includes professionals from the infrastructure, application, and process domains. It aims to leverage its IPs and partnerships to drive large transformation programmes.

Portfolio

Wipro's Cloud Professional Services portfolio includes:

- 1. Cloud Infrastructure (laas): Datacentre modernisation services through the private, public, and hybrid cloud models
- Cloud Platforms: Application modernisation using public and private PaaS and ISV enablement
- Applications (SaaS): Implementation and rollout services for cloudbased CRM, HCM, and ERP
- Business Processes (BPaaS) for functions like HR, F&A, and other vertical-specific BPaaS

The Cloud Professional Services portfolio is further enhanced with a strong set of complementary offerings in:

- 1. Advisory across architecture, infrastructure, and applications
- 2. Integration of applications and data across cloud and on-premise
- 3. Wipro CloudTrust enabled Security services
- 4. Testing and Validation Services under cloud environment.

Its focus on innovation has led to the development of a comprehensive set of tools, frameworks, and platforms that enhance the cloud experience across the life cycle.

Wipro's Cloud Services portfolio leverages strategic global alliances across the cloud ecosystem, including AWS, BMC, Cisco, Citrix, EMC, Google, HP, Microsoft, NetSuite, salesforce.com, Telstra, and Workday. For Cloud Integration, Wipro has partnered with Cast Iron, Dell Boomi, Informatica, and MuleSoft.

Go to market – Development of cloud command centre

Significant focus on innovation has led to the development of a comprehensive set of tools, frameworks, and platforms. Cloud Command Centre is one such innovation, which provides a single platform to provide, configure, secure, monitor, and manage applications and infrastructure for an extended enterprise.

Outlook - Needs to leverage global resources

Wipro is strongest in areas such as (a) leveraging global resources, (b) offering a full spectrum of IT services related to cloud, and (c) presence of local offices and local resources. However, it can further enhance its positioning by improving its client perception in the area of (1) managing vendor staff during a project's lifetime, (2) applying proven cloud methodologies, and (3) integrating project team with the client's company.



HCL Tech - Integrating the old with the new

Strategy - Cloud brokering and integration are at the core of HCL's cloud offering

- Cloud brokering and integration are core to success in the cloud model.
- It sees itself as a cloud enabler by offering control and sanity in cloud adoption.
- HCL's Enterprise of the Future framework is designed to help clients transform to a future-ready IT infrastructure without it being disruptive to the business operation.
- Its cloud-enabling transformation aims to create competitive advantage by:
 - Reducing cost through transformation of infrastructure and business processes
 - Providing unique cloud-enabled applications and creating better data access
 - Using social media, analytics, and mobility
- HCL believes that too dramatic a leap toward cloud will lead to fragmentation. Instead, it is necessary to think about service aggregation, monitoring, and governance to avoid creating standalone silos.
- HCL's transformational engagements will typically start with creating the integrated framework for the new IT model and then with the gradual transformation of the elements.

Portfolio – Focus on MyCloud and strategic partnerships

HCL's cloud services portfolio has three core elements:

- Transformational services that include consulting and implementation and migration, including SaaS enablement, cloud creation, and enterprise apps integration
- Operations, supervision, and governance that are based on the MyCloud service delivery platform. It covers all infrastructure elements from traditional IT to public cloud laaS and SaaS, spanning multiple physical locations
- 3. Cloud aggregation through MyCloud, integrating public cloud services

HCL is technology-agnostic, with many technology partners including HP, Cisco, EMC, Oracle, Dell, Hitachi, NetApp, VMware, IBM, CA, BMC, Microsoft, Red Hat, Citrix, OpenStack, AWS, Sungard, and Salesforce.com. Its current focus is on enhancement of its MyCloud offering with a set of new features and on implementation of several innovative infrastructure utility services offerings that are ready for market.

Positioning – Transformation of the infrastructure landscape

 HCL balances a business approach to cloud with the IT approach, but the practical emphasis is on the transformation of the infrastructure landscape.



- When focusing on cloud, HCL focuses less on the disruptive elements of cloud than on how cloud is an evolution – on how to make the journey.
- HCL positions cloud within an outsourcing framework and therefore competes against the traditional outsourcers.

Outlook

- HCL's strong focus on service management and integrating the different aspect of service management in the hybrid environment of traditional IT, private, and public cloud are key differentiators. Other vendors do not put integration at the core of their activity.
- HCL's MyCloud solution is unique. It remains to be seen how well it integrates with existing management solutions.
- Large transformation projects are broken into smaller projects in an integrated framework that makes the project more manageable and enables further integration. This mix of resources will appeal to clients and also means that HCL does not have to invest a lot in creating its own infrastructure.

Tech Mahindra - Small but rapidly growing

Strategy

- Tech Mahindra's main focus is on cloud professional services for enterprises and service providers. So far, service providers have been the main client group.
- Its detailed methodologies address business requirements as well as IT requirements, but the focus is on IT.

Portfolio[®]

Tech Mahindra does not have its own cloud, but it works as an independent professional services company. It has a particularly strong customer base in the telecommunications and manufacturing industries, but it also covers other verticals such as financial services.

Positioning

Tech Mahindra is still a small but rapidly growing player. It engages very well with its clients due to its flexibility, responsiveness, and cost-effective delivery.

Outlook

- Tech Mahindra is ramping up locally as the cloud client base increases, but it is not investing in local capabilities to the same extent as its competitors.
- Tech Mahindra's capabilities in integrating the cloud services with its other offerings and creating synergies (particularly the more businessrelated offerings) could improve, and that would help clients see it as more relevant for strategic projects.



Other key variables affecting demand

Key highlights

- In this section, we analyse six key variables; performance on each will determine the relative positioning of each of the Indian vendors. This applies especially to the traditional business. The six key variables are as follows:
 - Services innovation by Indian vendors and moving up the value chain
 - 2. High vendor margins or currency fluctuations do not impact pricing adversely
 - 3. Attrition top factor affecting customer perception
 - 4. Rising importance of captives; not a major threat yet
 - 5. Central European vendors provide quality delivery but lack scale
 - 6. Tier II vendors are thriving, but the opportunity is shrinking

Service innovation by Indian vendors and moving up the value chain

While traditional IT services spending will still drive healthy growth, moving up the value chain (providing IT consulting and business impact services versus cost takeouts) has been high on the agenda for most Indian vendors since 2007. This is a natural progression in order to gain share. However, our channel checks suggest that Indian vendors have not been very successful in making this transition.

Some of the largest users of offshore IT services still use the Indian vendors predominantly for tech support and development. Designing, functional services, and tech architecture are considered higher value-add services, which are still the reserve of the MNC vendors like Accenture, IBM, etc. The main reason for the lacklustre performance is that most Indian vendors do not have a deep enough understanding of the business of their clients.

Indian vendors would need to be more proactive and provide differentiated services and propositions. This would require them to be innovative. However, there are differing views on innovation. While one section of customers expects Indian vendors to provide business innovation, others believe the customer is the best positioned to drive business innovation with the IT vendor providing the technical know-how to execute it.

We gathered some interesting thoughts on innovation from our customer conversations. Here are the key highlights:



Example 1 – Customers cannot drive innovation

- There are two types of innovation:
 - Innovation with a capital 'I' brings in "disruptive innovation." This is usually business innovation.
 - Innovation with a small 'i' is incremental technology and delivery innovation. Examples include improvements in terms of delivery or pricing models, e.g., the shift from T&M to outcome-based pricing.
- We do not expect Indian vendors to deliver the capital 'I' innovation. They are not equipped for it, nor are they groomed by users to deliver that kind of innovation.
- Innovation always starts with the customer:
 - Innovation in a partnership has to come from synergy.
 - One cannot expect vendors to add innovation they are hired for cost cutting.
 - Vendors are expected to have a 'listen and follow' approach.
 There is nothing wrong with that, in our view.
- We are not sure if IT platforms present an innovation. For instance, TCS's Diligenta was a highly complex engagement but was not necessarily innovative

Example 2 – Expecting operating and business model innovation from customers

- Looking for operating and business model innovation from vendors
 - MNC vendors are good at innovation.
- We would be encouraged to see vendors develop contracts/engagement models that will help simplify the complete value chain and enhance productivity. This involves operating and business model innovation.
- We would be encouraged to see innovation for emerging markets, but we are not getting this from the Indian firms, as they only want to work in developed markets.
- Typical contracts incentivise the vendor to "maintain" the current status, not change it – buyers need to re-frame their objectives where appropriate, and this means also changing how they structure their contracts.
- Indian vendors have not developed or put forward any meaningful thought leadership.

In summary, we believe most Indian vendors lack the ability to do large-scale transformations due to a lack of requisite skill sets. However, we see TCS frequently challenging this notion. In general, across the Indian vendors, a lack of IP, capability or knowledge, and necessary investments in new technologies are highlighted as key reasons for the weak presence.



High vendor margins or currency fluctuations do not affect pricing adversely

Investors have often raised red flags about pricing given the volatility in the macroeconomic environment and exchange rates. In addition, high vendor margins in times of top-line and cost pressures for customers worry investors. Our conversations with customers suggest that most price negotiations are valid for the duration of the contract and are seldom altered unless there are any severe unforeseen circumstances. Moreover, most customers are unwilling to undertake currency risk and hence do not alter billing rates based on prevailing exchange rates.

We illustrate our findings with the help of the following example of a large financial services firm that has signed a multimillion dollar transformational deal with a tier-I Indian vendor.

- Pricing has been fixed for the duration of the contract, and the customers do not see a reason to change it midway.
- Outcome-based pricing model, so savings are split between the customer and the vendor half-and-half.
- The impact of regulatory changes affect the contract in terms of outcomes-based pricing.
- High vendor margin does not bother the customer.
- The deal is structured in such a way that it is a win-win for both.
- [The customer] wants the vendor to be profitable so that it can invest.
- Customers do not accept currency risk. The vendors must manage currency risk.

Predatory pricing by some vendors to gain share is also highlighted as a key risk by investors. However, customers seldom select vendors based on the lowest price. "You will get a vendor at any price, but will get what you pay for".

Customers are unwilling to assume currency risk and hence refrain from intermediate price revisions based on the INR/USD rates. Thus, overall, we do not expect rupee depreciation to impact pricing adversely.

Attrition is a top factor affecting customer perception

Attrition is a top factor affecting customer perception of service quality and satisfaction. It hurts retention of domain knowledge. Customers usually track vendor staff attrition closely. In fact, many customers ask for a detailed breakdown of attrition by segment, region, and business unit. Attrition is usually considered to be a supplier's problem. However, some customers have now come to believe that this is a joint problem and are doing more to retain employees of vendors in delivery centres.



Figure 45: Trend in attrition rates of top-tier Indian vendors

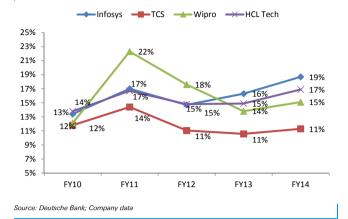
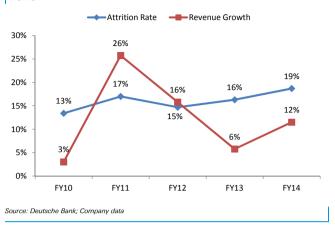


Figure 46: Infosys's USD revenue growth and attrition trend



TCS's low project-level attrition driving positive customer perception

Our channel checks suggest TCS's low project-level attrition is an important factor driving positive customer perception. Infosys scores low on this parameter, which has also impacted its client mining and strategic vendor status with its key customers.

Rising significance of captives; not a major threat yet

Achieving success with captives requires corporate senior management sponsorship. Usually, it is the change in leadership, especially at the CIO level, that brings back focus on captives. While captives have been used by customers alongside vendors, refocus on captives can be potentially negative for vendors. (For example, Astra Zenaca introducing a captive in Chennai was negative for Cognizant and Infosys.)

Based on our channel checks, we look at the positives and negatives of captive usage from the customers' point of view.

Key positives:

- Roughly 20% of total IT/BPO spending offshore goes toward captives.
- Work in captives is typically higher on the value curve i.e., work that vendors typically cannot deliver well.
- Customers estimate that total cost of captive usage is at least 20% lower than that with the vendors.
- While compensation levels are higher, employees at captives are more experienced. Greater productivity more than outweighs the higher compensation.

Key negatives:

- Lack of alternative options results in high attrition in captives after three to five years of operation
- Lack of best practice sharing and scale benefits
- Captives lack flexibility especially in times of extreme economic volatility

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Rural sourcing also on the rise

Customers are also experimenting with 'ruralsourcing' in the USA. In some skill-sets, US-based employees are 7x more productive, and on average they are about 4x more productive, than employees at offshore vendors in India. Many US cities are offering incentives for companies that bring back jobs to the USA.

MetLife to add 2,622 jobs in Cary and Charlotte

Press reports (March 2013) suggest that state officials successfully convinced insurance giant MetLife to add 2,600 high-paying jobs in Cary and Charlotte, North Carolina, during the next three years.

MetLife was awarded a state incentives package worth more than USD94m if it meets hiring and investment goals, and it is expected to receive millions more in local incentives.

The 2,622 new jobs will be split evenly between Charlotte and Cary and will pay average annual wages of USD81,891. MetLife plans to establish a hub for its US retail business in Charlotte and a hub for its global technology and operations unit in Cary.

The dual North Carolina campuses are part of a major real estate consolidation effort by MetLife as it seeks to cut USD600m in expenses. The hubs will consolidate workers from more than 30 sites in the Northeast, where real estate is more expensive. The company does not yet know how many of the jobs at the two campuses will be filled with employees relocating from elsewhere.

Trend universally negative for Indian vendors

While the trend is universally negative for most Indian vendors, recent datapoints suggest Infosys, HCL Tech and Cognizant have been negatively affected due to this trend.

Central European vendors provide quality delivery but lack scale

Rise of the Eastern European vendors like EPAM and Luxoft has brought back concerns of potential competition from a low-cost delivery perspective. European vendors are comparable to the size of the Indian vendors in FY01.

Central European vendors provide quality delivery but lack scale. Our channel checks suggest customers rate the Central European vendors highly on quality of service. Indian vendors, however, compete on scale.



Figure 47: EPAM and Luxoft's size comparable to that of Infosys in FY01

	Infosys			TCS			Wipro			EPAM	Luxoft
	FY01	FY05	FY11	FY01	FY05	FY11	FY01	FY05	FY11	FY14	FY14
Revenue (USDm)	410	1,593	6,042	678	2,378	8,187	382	1,206	5,221	670.2	398
Revenue from US (USDm)	302	1,038	3,945	451	1,376	4,707	244	787	2,887	331.4	167.2
US geo revenues	73.5%	65.2%	65.3%	66.5%	57.9%	57.5%	64.0%	65.3%	55.3%	49.4%	42.0%
Revenue from Europe (USDm)	77	355	1,302	137	513	2,029	112	359	1,415	271.5	218.9
Europe geo revenues	18.8%	22.3%	21.6%	20.2%	21.6%	24.8%	29.4%	29.8%	27.1%	40.5%	55.0%
Client concentration											
Active clients	273	438	620	NA	621	1034	217	421	904	263	NA
% revenue from top 5 clients	26.0%	21.2%	15.4%	NA	19.3%	21.4%	30.0%	18.0%	10.9%	NA	69.7%
% revenue from top 10 clients	39.2%	33.8%	25.7%	NA	30.5%	29.6%	45.0%	30.3%	19.5%	NA	81.2%
Non ADM Revenue	25.3%	46.9%	61.0%	NA	27.1%	53.5%	8.0%	37.6%	60.5%	21.3%	NA
Total Employees	9,831	36,750	130,820	NA	45,714	198,614	9,934	41,857	122,385	10,533	7,500
Attrition	11.2	9.7	17.0	NA	8.0%	14.4%	13.0%	15.0%	14.9%	NA	9.9%
Revenue per employee (USD)	41,705	43,347	46,186	NA	52,019	41,221	38,454	28,812	42,660	63,629	53,067
Cost per employee (USD)	24,951	29,148	31,122	NA	34,122	28,853	25,022	20,283	32,950	55,967	43,333
EBITDA per employee (USD)	16,754	14,199	15,063	NA	17,897	12,367	13,431	8,530	9,711	7,662	9,733
Contract type											
Fixed price	28.2%	30.0%	40.3%	NA	52.0%	49.4%	16%	22.0%	45.7%	NA	42.4%
Time and material	71.8%	70.0%	59.7%	NA	48.0%	50.6%	84%	78.0%	54.3%	NA	57.6%
Source: Company data, Deutsche Bank											

Figure 48: EPAM and Luxoft's revenue and revenue growth indexed to that of Infosys (USDm)

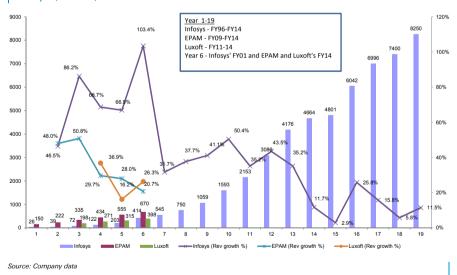
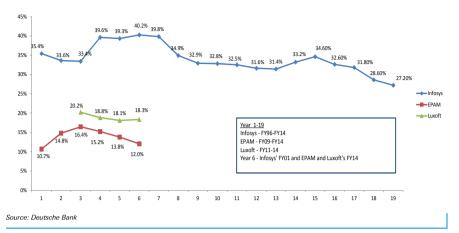




Figure 49: EPAM and Luxoft's EBITDA margins indexed to that of Infosys



Key similarities:

- Infosys India's second largest IT service provider, had revenues of USD410m in FY01.
 - This compares to revenues of USD400-700m reported by large Central European vendors like Luxoft and EPAM.
- Both sets of vendors follow a centre-based delivery model.
 - ~90% of delivery headcount for both was based in 'low-cost' locations.
- Application development and maintenance (ADM) contributed to >75% of the revenues of both sets of vendors.
- Total number of employees for both vendor sets is in the range of 8,000-10,000.

Key differentiators:

- Service line and vertical diversification helped Infosys maintain healthy growth rates.
- Indian vendors have depended on broadening their employee pyramid (only 35% employees with more than five years of work experience) to maintain high margins while expanding their service footprint.
 - >75% of the employees of Central European vendors have more than five years of work experience.
- 80% of the employees with Central European vendors have masters degrees or higher.
 - We believe the comparable number for the Indian vendors would be <10%.
- Indian vendors have high dependence on highly profitable markets like USA (55-60% of revenues) and financial services (25-45%).
 - The comparable numbers for the Eastern European vendors are 42-49% and 30-60%, respectively.

Threat of competition from Eastern European vendors is low

We believe the overall threat to the Indian IT services industry from Eastern European vendors is low. For the purpose of ranking top tier Indian vendors on their ability to ward off competition from these vendors, we use breadth of services and geographical presence (in terms of delivery footprint) as the two key factors. In our view TCS and Infosys rank at the top.



Tier II vendors are thriving, but the opportunity is shrinking

Customers believe, Tier II vendors are best suited for:

- new application development, especially for "agile development methodologies"
- work for which innovation or co-creation is a key criterion
- engagements that need extensive access to and involvement of senior management in midsize or small deals (USD10-20m)
- faster turnaround with 'heavy hitters' and subject matter/domain experts.

Mature outsourcers, who previously consolidated volumes with Tier I vendors after the global financial crisis, are now reintroducing Tier II Indian IT service companies and niche players to address the above needs. Tier II vendors such as Mindtree, Hexaware, Polaris, and Virtusa are winning deals in higher value-add services at the expense of the Tier I vendors because of their quick turnaround time and greater senior management engagement. Tier I's focus on gaining volume market share has also contributed to this change.

Tier II vendors not fully equipped for global rollouts

Customers have been using Tier II vendors for niche skills, especially in digital technologies. Since spend on these services is low, it currently does not pose a serious threat to the Tier I Indian vendors. Moreover, for global rollouts, we believe that customers would prefer to benefit from the scale and geographical presence of the Tier I vendors. However, we have noticed that Tier I vendors with high attrition at the sales and account management level have witnessed loss of share to Tier II vendors in some of their important accounts. In particular, our channel checks suggest Mindtree and Tech Mahindra have benefitted at the cost of Infosys and Wipro. Our overall ranking on this parameter in Figure 2 reflects these dynamics.



TCS – Proactive investments make it best placed to gain share

Maintains its sector leader status

Scores highest on our nine-parameter vendor evaluation screen

TCS scores the highest on our nine-parameter screen evaluating the attractiveness of the top-tier Indian vendors to the changing IT spending landscape (see Figure 2). We believe TCS is best positioned to gain share from (a) expansion of its strategic vendor positioning with its key customers, (b) strong presence in continental Europe, (c) proactive investment in Japan, (d) focus on evolutionary transformation and innovation in new technology services (SMAC), and (e) consistency in service delivery from low attrition. Consequently, we expect TCS to continue delivering one of the fastest USD revenue growth rates (15.6% CAGR over FY14-20E) among the top-tier Indian vendors.

Revenue split between Americas, Europe, and Asia to be 44:37:19 in FY20

Given TCS's strategic vendor status with most of its top customers, we expect it to gain share in spend on new technologies. We also like its proactive investment in markets with low offshore penetration. In our view, its strong presence in Continental Europe and early investment in Japan will help TCS diversify its revenue base. We expect TCS's FY20 revenue contribution from Americas, Europe, and Asia Pacific to be 44:37:19 vs. the current 53:29:18 (see Figure 52 and Figure 53).

Rupee weakness to partially offset margin headwinds

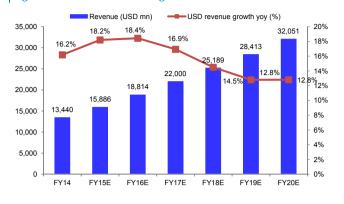
Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, and (c) higher SG&A expenses and pricing and volume pressure on traditional business due to potential cloud adoption can be margin dilutive. However, the prolonged rupee weakness will likely help limit margin decline. We thus expect TCS's EBIT margin to be around 27% over FY15-17E and 24-27% over FY18-20E (see Figure 51). Our model assumes INR/USD rates of 60-64 (see Figure 4).

Need proactive investments in innovation and moving up the value chain

Our recent channel checks continue to report positive business traction for the company. Most customers rate TCS very highly for its service orientation, collaboration, cost, and delivery focus. It is functionally very sound and understands clients' cost pressures. It understands how to apply a long-term view to building a relationship and how to make it mutually beneficial. Customers highlight innovation as an opportunity for TCS. While TCS understands the clients' strategy, it is too passive and does not propose ideas. In addition, 50-60% of the business is still applications based. It still does not have a big presence in value-add or transformational services.

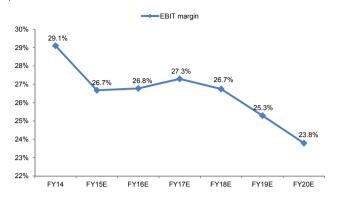


Figure 50: TCS - Revenue growth trend



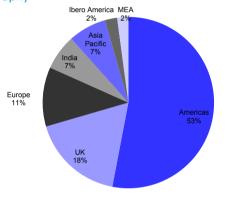
Source: Company data, Deutsche Bank

Figure 51: TCS – EBIT margin trend



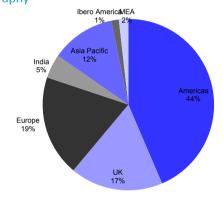
Source: Company data, Deutsche Bank

Figure 52: TCS – FY14 revenue contribution by geography



Source: Deutsche Bank; Company data

Figure 53: TCS – FY20E revenue contribution by geography



Source: Deutsche Bank estimates

Key highlights from our recent customer conversations

Key positives:

- TCS is service-oriented and collaborative as a vendor. The company is cost and delivery focused, and it is much better at client engagement than some MNC vendors.
- Understands how to apply a long-term view to building a relationship and how to make it mutually beneficial. TCS has done well and provides a lot of give-and-take compared to the other Indian vendors.
- No CIO gets questioned for hiring TCS. All other vendors lack this differentiation and image.
- TCS is functionally sound and understands clients' cost pressures.
 Other Indian vendors try to provide quick-fix solutions due to which clients are then forced to use internal resources to make the organization healthy.
- TCS gains from vendor consolidation as it provides contractual flexibility, especially on volume-based services where the aim is to lower costs.
- TCS management is well involved in client relationships, easily accessible, and delivers on commitments.



- Has started winning mid-size deals for private cloud implementation in the financial services sector.
- Extremely successful at executing complex platform engagements in the insurance sector.
- Possesses good industry knowledge given its emphasis on hiring senior industry executives.

Key negatives:

- TCS has a large global presence but still not large enough to help clients in all their locations.
- Innovation is an opportunity for TCS. The company understands the clients' strategy but is too passive and does not propose ideas.
- 50-60% of the business is still applications based. TCS still does not have a big presence in value-add or transformational services.
- TCS-COIN (Co-Innovation Network) this is a good idea in principle, but TCS is not positioning or selling it effectively. It is still at least three levels away from connecting with decision makers at the clients.

Changes in estimates

TCS	2015E		2016E			2017E			CAGR	
	New	Old	Change	New	Old	Change	New	Old	Change	FY17/FY15
INR/USD assumption	60.04	60.04	0.0%	60.31	58.94	2.3%	61.28	57.77	6.1%	1.0%
Revenue (USDm)	15,887	15,887	0.0%	18,814	18,853	-0.2%	22,000	22,124	-0.6%	17.7%
(INRm)	18.2%	18.2%		18.4%	18.7%		16.9%	17.4%		
Revenue	953,866	953,866	0.0%	1,134,721	1,111,179	2.1%	1,348,159	1,278,194	5.5%	18.9%
Cost of services rendered (excld dep)	500,870	499,936	0.2%	582,173	572,130	1.8%	721,030	694,904	3.8%	20.0%
Cost of equipment & software licenses	18,414	18,414	0.0%	19,449	19,449	0.0%	7,738	7,738	0.0%	-35.2%
Total cost of revenues	519,284	518,350	0.2%	601,622	591,580	1.7%	728,768	702,642	3.7%	18.5%
Gross Profit	434,582	435,516	-0.2%	533,099	519,599	2.6%	619,391	575,552	7.6%	19.4%
Selling, general and administrative (excl. depn)	160,578	160,299	0.2%	206,945	203,259	1.8%	225,661	217,324	3.8%	18.5%
Research and development	1,047	1,047	0.0%	2,401	2,351	2.1%	2,853	2,705	5.5%	65.1%
Total operating expenses	161,625	161,346	0.2%	209,346	205,611	1.8%	228,514	220,028	3.9%	18.9%
EBITDA	272,958	274,170	-0.4%	323,753	313,989	3.1%	390,877	355,523	9.9%	19.7%
Depreciation	18,513	18,513	0.0%	19,925	19,925	0.0%	22,898	22,898	0.0%	11.2%
EBIT	254,444	255,657	-0.5%	303,828	294,064	3.3%	367,979	332,625	10.6%	20.3%
Other income (expense), net	24,674	24,691	-0.1%	27,507	27,610	-0.4%	39,335	39,272	0.2%	26.3%
Profit Before Tax	279,118	280,348	-0.4%	331,335	321,674	3.0%	407,314	371,897	9.5%	20.8%
Income tax expense (benefit)	64,199	64,480	-0.4%	76,382	74,155	3.0%	93,897	85,733	9.5%	20.9%
Income after taxes before minority interests	214,919	215,868	-0.4%	254,952	247,519	3.0%	313,416	286,164	9.5%	20.8%
Minority interests	-1,505	-1,505		-1,104	-1,104		-1,112	-1,112		
Net income	213,414	214,363	-0.4%	253,848	246,415	3.0%	312,304	285,052	9.6%	21.0%
EPS	109.04	109.52	-0.4%	129.70	125.90	3.0%	159.56	145.64	9.6%	21.0%
Key Ratios			bps			bps			bps	
Gross Margin	45.6%	45.7%	-10	47.0%	46.8%	22	45.9%	45.0%	91	
EBITDA margin	28.6%	28.7%	-13	28.5%	28.3%	27	29.0%	27.8%	118	
EBIT margin	26.7%	26.8%	-13	26.8%	26.5%	31	27.3%	26.0%	127	
PAT margin	22.4%	22.5%	-10	22.4%	22.2%	20	23.2%	22.3%	86	
Effective tax rate Source: Deutsche Bank estimates	23.0%	23.0%	0	23.1%	23.1%	0	23.1%	23.1%	0	



Valuation

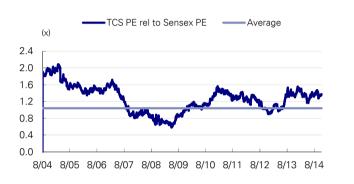
We value Indian IT services firms on a PE basis, relative to their historical trading range, compared with peers as well as growth rates. We value TCS at a target PE of 24x FY16E. Our target PE multiple implies a PEG of 1.5. In light of abating concerns regarding the US Immigration Bill and consistent performance, we have reverted to the higher PEG. On a one-year forward basis, TCS currently trades at a ~30% premium to Infosys. Given TCS's sub-par performance in the Sept-Q, we expect this to contract in the short term.

Figure 55: TCS – 1 year forward PE

Source: Company data, Deutsche Bank, Bloomberg Finance LP.



Figure 56: TCS 1 year forward PE vs. Sensex PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP.

Risks

We identify three industry-level risks: 1) a more severe-than-anticipated global slowdown, 2) global vendor competition, and 3) aggressive steps taken by global vendors to adopt the offshore model and increasing wage inflation with supply-side issues. For TCS, the key company-specific downside risk remains that of relatively higher exposure to the BFSI vertical and consequent compression of its earnings multiple due to the greater impact of the financial market turmoil.



Model updated:03 November 2014

Running the r	numbers		
Asia			
India			

Software & Services Tata Consultancy

Reuters: TCS.BO Bloomberg: TCS IN

Buv

Price (1 Dec 14)	INR 2,693.70
Target Price	INR 3,170.00
52 Week range	INR 1,990.15 - 2,778.00
Market Cap (m)	INRm 5,272,166
	USDm 85,042

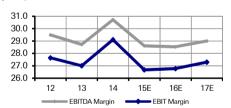
Company Profile

Tata Consultancy Services, a division of Tata Sons Limited, is a global IT services organization that provides a comprehensive range of IT services to its clients in diverse industries. The company, through its offices in 32 countries and development centers in 10 countries, serves over 800 global clients including some of the top companies in the US.

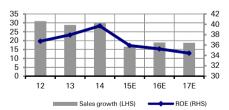
Price Performance



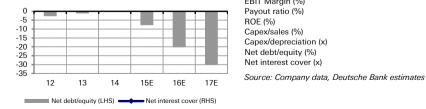
Margin Trends



Growth & Profitability



Solvency



Payout ratio (%)

Capex/sales (%)

Capex/depreciation (x)

ROE (%)

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Fiscal year end 31-Mar	2012	2013	2014	2015E	2016E	2017E
Financial Summary						
DB EPS (INR)	54.35	71.23	97.63	108.86	129.70	159.57
Reported EPS (INR)	54.35	71.23	97.63	109.42	130.26	160.13
DPS (INR)	31.00	22.00	32.00	60.00	40.00	48.00
BVPS (INR)	166.2	209.3	282.7	326.6	412.4	518.0
Weighted average shares (m)	1,957	1,957	1,957	1,957	1,957	1,957
Average market cap (INRm)	2,206,053	2,546,603	3,686,554	5,272,166	5,272,166	5,272,166
Enterprise value (INRm)	2,110,494	2,453,780	3,513,248	5,046,450	4,932,716	4,789,474
Valuation Metrics						
P/E (DB) (x)	20.7	18.3	19.3	24.7	20.8	16.9
P/E (Reported) (x)	20.7	18.3	19.3	24.6	20.7	16.8
P/BV (x)	7.03	7.51	7.55	8.25	6.53	5.20
FCF Yield (%)	2.4	2.1	3.5	3.4	3.8	4.7
Dividend Yield (%)	2.8	1.7	1.7	2.2	1.5	1.8
EV/Sales (x)	4.3	3.9	4.3	5.3	4.3	3.6
EV/EBITDA (x)	14.6	13.6	14.0	18.5	15.2	12.3
EV/EBIT (x)	15.6	14.4	14.8	19.8	16.2	13.0
Income Statement (INRm)						
Sales revenue	488,938	629,895	818,094	953,866	1,134,721	1,348,159
Gross profit EBITDA	230,165 144,177	297,351 180,872	396,030 251,323	434,582 272,958	533,099 323,753	619,391 390,877
Depreciation	9,036	100,872	13,243	18,513	19,925	22,898
Amortisation	0,000	0	0	0	0	0
EBIT	135,141	170,080	238,080	254,444	303,828	367,979
Net interest income(expense)	8,236	10,722	13,789	18,736	27,507	39,335
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinaries	0	0	0	0	0	0
Other pre-tax income/(expense) Profit before tax	-4,195	451 181,252	2,020 253,889	5,181 278,361	0 331,335	0 407,314
Income tax expense	139,182 31,688	40,344	60,712	64,199	76,382	93,897
Minorities	1,110	1,494	2,089	0 - 7, 100	0	0
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	106,384	139,414	191,088	214,163	254,952	313,416
DB adjustments (including dilution)	0	0	0	-1,095	-1,104	-1,112
DB Net profit	106,384	139,414	191,088	213,068	253,848	312,304
Cash Flow (INRm)						
	75.000	00.074	400.007	400 700	000 000	075 047
Cash flow from operations Net Capex	75,622 -22,726	80,674 -28,321	169,227 -41,449	193,703 -12,956	222,963 -22,222	275,047 -25,010
Free cash flow	52,896	52,352	127,778	180,746	200,740	250,037
Equity raised/(bought back)	3,784	-6,517	23,354	-748	-1,104	-1,112
Dividends paid	-38,978	-48,571	-70,649	-127,588	-85,902	-105,684
Net inc/(dec) in borrowings	-1,089	2,767	541	2,105	2,804	3,310
Other investing/financing cash flows	-12,315	-1,436	-84,767	-2,529	-557	-557
Net cash flow	4,297	-1,405	-3,743 <i>0</i>	51,987	115,981	145,994
Change in working capital	34,961	54,956	U	0	0	0
Balance Sheet (INRm)						
Cash and other liquid assets	19,836	18,432	14,688	66,675	183,760	330,866
Tangible fixed assets	64,548	81,944	103,644	98,087	100,384	102,496
Goodwill/intangible assets	34,929	35,063	41,568	41,568	41,568	41,568
Associates/investments	91,649	94,369	179,481	183,514	184,072	184,629
Other assets Total assets	201,028	290,928	349,744	407,789	485,106	576,353
Interest bearing debt	411,990 10,650	520,735 13,417	689,125 13,958	797,633 16,063	994,891 18,868	1,235,913 22,177
Other liabilities	70,831	91,198	114,911	133,981	159,385	189,364
Total liabilities	81,481	104,615	128,869	150,045	178,252	211,542
Shareholders' equity	325,233	409,560	553,352	639,179	807,125	1,013,745
Minorities	5,276	6,561	6,905	8,410	9,514	10,626
Total shareholders' equity	330,509	416,120	560,257	647,588	816,639	1,024,371
Net debt	-9,186	-5,015	-730	-50,612	-164,892	-308,689
Key Company Metrics						
Sales growth (%)	31.0	28.8	29.9	16.6	19.0	18.8
DB EPS growth (%)	22.0	31.0	37.1	11.5	19.1	23.0
EBITDA Margin (%)	29.5	28.7	30.7	28.6	28.5	29.0
EBIT Margin (%)	27.6	27.0	29.1	26.7	26.8	27.3
Payout ratio (%)	57.0	30.9	32.8	54.8	30.7	30.0

57.0

36.7

4.6

2.5

-2.8

nm

30.9

37.9

4.5

2.6

-1.2

nm

32.8

39.7

5.1

3.1

-0.1

nm

54.8

35.9

1.4

0.7

-7.8

nm

30.7

35.3

2.0

1.1

nm

-20.2

30.0

34.4

1.9

1.1

nm

-30.1



Infosys – Business model with puts and takes

Needs improvement in customer intimacy

Business model with puts and takes

Infosys's business model is with puts and takes. We expect the company to deliver 12.3% USD revenue CAGR over FY14-20E. The leadership change and recent additions to senior management help it score at par with TCS on its readiness in addressing the SMAC opportunity. In addition (a) clear articulation of long-term revenue growth (15-18% yoy) and margin (25-28%) targets, (b) management actively modernising sales and delivery structure and processes, and (c) stable leadership and organisation structure can help the company compete better. However, to get back its sector leader status, it will have to address issues like (a) loss of strategic vendor status, (b) high attrition (which affects customer perception of delivery quality), and (c) defining positioning and improving presence in markets outside North America.

Weak positioning in markets outside North America

We see Infosys's high exposure to North America (61% vs. 53% for TCS) and inferior positioning in growth markets like Germany, France, and Japan as a key negative. Adoption of SMAC services by mature outsourcers (especially in North America) can be potentially revenue cannibalizing. However, given its proactive investment toward platforms and solutions and its role as a cloud integrator, we do not expect the impact to be very significant. Nevertheless, we believe Infosys would have to accelerate its investments and penetration of the new growth markets to maintain healthy revenue growth over the long term. We expect revenue contribution from North America, Europe, and Asia to change from 61:24:15 in FY14 to 55:28:17 in FY20 (see Figure 59 and Figure 60).

Rupee weakness to partially offset margin headwinds

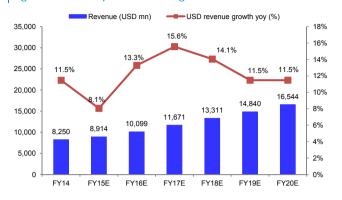
Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, and (c) higher SG&A expenses and pricing and volume pressure on traditional business due to potential cloud adoption can be margin dilutive. However, the prolonged rupee weakness will likely help limit margin decline. We thus expect Infosys's EBIT margin to be c.25% over FY15-17E and 22-25% over FY18-20E (see Figure 58). Our model assumes INR/USD rates of 60-64 (see Figure 4).

Customers watching the situation at Infosys closely

Customers believe that Infosys is at a crossroad and are watching the situation closely. This can impact business in the short term. Furthermore, attrition at the middle management level is hurting customer confidence. A key implication of the leadership turmoil at Infosys has been that, for many large customers, it is like any other vendor now. While CEO location has been one of the key talking points in our recent investor interactions, customers believe that CEO location is not the main driver of customer intimacy, but rather organisational culture and initiatives undertaken are important to develop a greater sense of intimacy. However, Infosys is fundamentally a strong company with top-quality delivery. This could help the new management turn the business around faster.

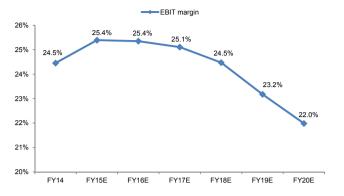


Figure 57: Infosys - Revenue growth trend



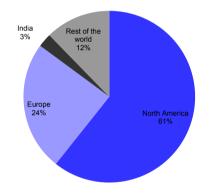
Source: Company data, Deutsche Bank

Figure 58: Infosys – EBIT margin trend



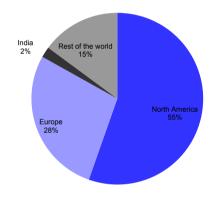
Source: Company data, Deutsche Bank

Figure 59: Infosys – FY14 revenue contribution by geography



Source: Company data, Deutsche Bank

Figure 60: Infosys – FY20E revenue contribution by geography



Source: Deutsche Bank estimates

Key highlights from our recent customer conversations

Key positives

- Infosys's acquisition of Lodestone is positive; a large financial services customer has started using them, although the engagement is very small.
- Vendor relationships are sticky, but rise in attrition can create a negative perception that impacts business.
- Infosys is fundamentally a strong company with top-quality delivery. This can help the new management turn the business around faster.
- Infosys's choice of CEO is a positive step in the right direction.

Key negatives:

- Key implication of all the turmoil at Infosys is that it has lost its differentiation, i.e., the company's premium image is now gone – "It is like any other vendor now."
- Infosys is at a crossroad, and customers are watching the situation closely. This can impact business in the short term.



- CEO location not the main driver of customer intimacy, but rather organisational culture and initiatives undertaken to develop the greater sense of intimacy.
- Attrition at middle management level is hurting customer confidence.
- Centralisation of decision making in Bangalore led to a lot of decision delays.
- Excluded from the vendor short list, as it is not interested in basic maintenance work.

Changes in estimates

Infosys		2015E			2016E			2017E		CAGR
Old	Chg	New			Old	Chg	New	Old	Chg	FY15E FY17E
Revenue (USDm)	8,914	8,914	0.0%	10,099	10,099	0.0%	11,671	11,671	0.0%	14.4%
Revenues (INRm)	535,204	535,204	0.0%	609,047	595,286	2.3%	715,229	674,272	6.1%	15.6%
Software development expenses	319,230	319,950	-0.2%	370,753	364,476	1.7%	439,667	419,326	4.9%	17.4%
Gross Profit	215,974	215,253	0.3%	238,295	230,810	3.2%	275,561	254,946	8.1%	13.0%
Total Expenditure	385,000	385,721	-0.2%	437,748	429,957	1.8%	511,190	486,754	5.0%	15.2%
EBITDA (INRm)	150,204	149,483	0.5%	171,299	165,329	3.6%	204,038	187,519	8.8%	16.6%
Other income	29,744	29,726	0.1%	30,190	29,961	0.8%	44,949	42,333	6.2%	22.9%
Income after other income and provision	179,947	179,209	0.4%	201,490	195,290	3.2%	248,988	229,852	8.3%	17.6%
Depreciation	12,536	12,536	0.0%	16,902	16,902	0.0%	24,449	24,449	0.0%	39.7%
Profit Before Tax	167,411	166,673	0.4%	184,588	178,388	3.5%	224,539	205,403	9.3%	15.8%
Tax	46,167	45,973	0.4%	48,658	47,023	3.5%	59,189	54,144	9.3%	13.2%
Net Income (INRm)	121,244	120,700	0.5%	135,930	131,365	3.5%	165,350	151,259	9.3%	16.8%
EPS (INR)	211.96	211.01	0.5%	237.64	229.66	3.5%	289.07	264.44	9.3%	16.8%
Key Ratios			bps			bps			bps	
Gross margin	40.4%	40.2%	13	39.1%	38.8%	35	38.5%	37.8%	72	
EBITDA margin	28.1%	27.9%	13	28.1%	27.8%	35	28.5%	27.8%	72	
EBIT margin	25.7%	25.6%	13	25.4%	24.9%	42	25.1%	24.2%	92	
Net margin	22.7%	22.6%	10	22.3%	22.1%	25	23.1%	22.4%	69	
Tax rates	27.6%	27.6%	-1	26.4%	26.4%	0	26.4%	26.4%	0	
Assumptions										
INR/USD assumption	60.04	60.04	0.0%	60.31	58.95	2.3%	61.28	57.77	6.1%	1.0%
Volumes										
Onsite manmonths	361,444	361,444	0.0%	409,325	409,325	0.0%	461,231	461,231	0.0%	13%
Offshore manmonths	1,130,607	1,130,607	0.0%	1,280,378	1,280,378	0.0%	1,442,743	1,442,74 3	0.0%	13%
Total	1,492,052	1,492,052	0.0%	1,689,703	1,689,703	0.0%	1,903,975	1,903,97 5	0.0%	13%
Revenue realisation (USD)										
Onsite manmonth rate	12,552	12,552	0.0%	12,557	12,557	0.0%	12,878	12,878	0.0%	1.3%
Offshore manmonth rate	3,872	3,872	0.0%	3,873	3,873	0.0%	3,972	3,972	0.0%	1.3%
Volumes growth (yoy)										
Onsite manmonths	5.1%	5%	0	13.2%	13%	0	12.7%	13%	0	
Offshore manmonths	10.4%	10%	0	13.2%	13%	0	12.7%	13%	0	
Total	9.1%	9.1%	0	13.2%	13.2%	0	12.7%	12.7%	0	
Price chg (yoy)										
Onsite manmonth rate	0.7%	0.7%	0	0.0%	0.0%	0	2.6%	2.6%	0	
Offshore manmonth rate	0.0%	0.0%	0	0.0%	0.0%	0	2.6%	2.6%	0	
Blended	-0.9%	-0.9%	0	0.0%	0.0%	0	2.6%	2.6%	0	



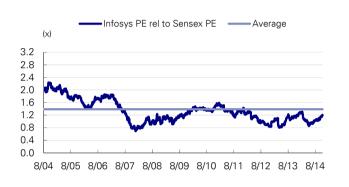
Valuation

We value Indian IT services firms on a P/E basis relative to their historical trading range, compared with both peers and growth rates. We now value Infosys at 19x FY16E (vs. 17xFY15/06 earlier) – closer to its average historical forward PE. We believe the multiple is justified based on our forecast of an earnings CAGR of 12% (vs. 9.5% earlier) over FY15-17E and because it is better positioned than in 2003 on such key factors as revenue size, net worth, dependence on the US, and client concentration. We use a PEG ratio of 1.5 (vs. 1.4 earlier).

Figure 62: Infosys – 1 year forward PE



Figure 63: Infosys 1 year forward PE vs. Sensex PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP,

Source: Company data, Deutsche Bank, Bloomberg Finance LP.

Risks

Key downside risks include (a) inability to execute the ambitious overhaul in sales and deliver structure and processes, (b) inability to win back its strategic vendor status and hence continuation of poor client mining, (c) significant rupee appreciation in the near term, and (d) global vendor competition. We believe the rhetoric over outsourcing will likely remain strong and may even become a sector overhang as political pressure on outsourcing increases.



Running the numbers	
Asia	
India	
Software & Services	

Infosys Limited

Reuters: INFY.BO Bloomberg: INFO IN

Buy

Price (1 Dec 14)	INR 4,350.00
Target Price	INR 4,750.00
52 Week range	INR 2,923.00 - 4,363.95
Market Cap (m)	INRm 2,484,763
	LISDm 40 080

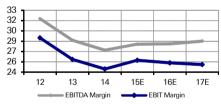
Company Profile

Infosys, one of the best managed and most profitable firms in the space, in our view, has one of the most risk-averse business models in the sector. We continue to believe Indian vendors are in a strong competitive position to weather this macro environment and capitalize on continued shift to low-cost sourcing overseas. Infosys is also well positioned, we believe, to capitalize on increasing demand for back-end integration services.

Price Performance



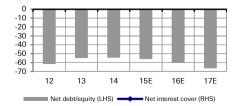
Margin Trends



Growth & Profitability



Solvency



Aniruddha Bhosale +91 22 7180 4037

aniruddha.bhosale@db.com

Source: Company data, Deutsche Bank estimates

Fiscal year end 31-Mar	2012	2013	2014	2015E	2016E	2017E
Financial Summary						
DB EPS (INR)	145.38	164.70	189.98	211.96	237.64	289.07
Reported EPS (INR)	145.38	164.70	189.98	211.96	237.64	289.07
DPS (INR)	37.37	42.00	63.00	83.55	95.06	115.63
BVPS (INR)	585.0	695.8	830.9	949.6	1,084.5	1,248.7
Weighted average shares (m)	572	572	572	572	572	572
Average market cap (INRm)	1,530,614	1,420,454	1,754,536	2,484,763	2,484,763	2,484,763
Enterprise value (INRm)	1,320,814	1,179,794	1,449,806	2,134,880	2,065,858	1,964,651
Valuation Metrics						
P/E (DB) (x)	18.4	15.1	16.1	20.5	18.3	15.0
P/E (Reported) (x)	18.4	15.1	16.1	20.5	18.3	15.0
P/BV (x)	4.80	4.15	3.95	4.58	4.01	3.48
FCF Yield (%)	4.7	5.6	5.8	3.2	5.1	6.9
Dividend Yield (%)	1.4	1.7	2.1	1.9	2.2	2.7
EV/Sales (x)	3.9	2.9	2.9	4.0	3.4	2.7
EV/EBITDA (x)	12.3	10.2	10.6	14.2	12.1	9.6
EV/EBIT (x)	13.5	11.3	11.8	15.5	13.4	10.9
Income Statement (INRm)						
Sales revenue	337,340	403,520	501,330	535,204	609,047	715,229
Gross profit	148,630	162,010	193,660	215,974	238,295	275,561
EBITDA	107,160	115,580	136,340	150,204	171,299	204,038
Depreciation	9,370	11,290	13,740	12,536	16,902	24,449
Amortisation FBIT	0 97,790	0 104,290	0 122,600	0 137,668	154 200	170 500
Net interest income(expense)	19,040	23,590	26,690	29,744	154,398 30,190	179,590 44,949
Associates/affiliates	0	25,550	20,030	23,744	0	0
Exceptionals/extraordinaries	0	0	0	0	0	0
Other pre-tax income/(expense)	0	0	0	0	0	0
Profit before tax	116,830	127,880	149,290	167,411	184,588	224,539
Income tax expense	33,670	33,670	40,620	46,167	48,658	59,189
Minorities	0	0	0	0	0	0
Other post-tax income/(expense)	02 160	0 94,210	100 670	121 244	125.020	165.250
Net profit	83,160		108,670	121,244	135,930	165,350
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	83,160	94,210	108,670	121,244	135,930	165,350
Cash Flow (INRm)						
Cash flow from operations	87,162	101,567	128,956	99,148	149,764	194,662
Net Capex	-15,020	-21,880	-27,930	-20,000	-22,000	-22,000
Free cash flow	72,142	79,687	101,026	79,148	127,764	172,662
Equity raised/(bought back)	-2,733	-3,072	-4,608	-6,117	-6,960	-8,466
Dividends paid	-21,350	-23,999	-35,998	-47,790	-54,372	-66,140
Net inc/(dec) in borrowings Other investing/financing cash flows	0	0	0	0	0	0
Net cash flow	48,059	52,616	60,420	25,241	66,432	98,056
Change in working capital	-5,368	-3,933	6,546	-34,632	-3,069	4,863
Ralanco Shoot (INRm)						
Balance Sheet (INRm)	005.040	040.000	050 500	004.050	070 075	474.004
Cash and other liquid assets	205,910	218,320	259,500	304,653	373,675	474,881
Tangible fixed assets Goodwill/intangible assets	54,090 11,660	64,680 23,440	78,870 24,990	84,564 24,990	89,662 24,990	87,214 24,990
Associates/investments	3,890	22,340	45,230	45,230	45,230	45,230
Other assets	107,930	134,730	161,960	156,874	175,662	202,655
Total assets	383,480	463,510	570,550	616,311	709,219	834,970
Interest bearing debt	0	0	0	0	0	0
Other liabilities	48,870	65,540	94,060	71,977	88,886	120,741
Total liabilities	48,870	65,540	94,060	71,977	88,886	120,741
Shareholders' equity	334,610	397,970	475,300	543,144	620,333	714,229
Minorities Total shareholders' equity	0 334,610	0 397,970	0 475,300	0 543,144	0 620,333	0 714,229
Net debt	-205,910	-218,320	-259,500	-304,653	-373,675	-474,881
V C NA-t-i		-,	,	,	,-	,
Key Company Metrics	00 =	40.0	24.2	0.0	40.0	47 -
Sales growth (%)	22.7	19.6	24.2	6.8	13.8	17.4
DB EPS growth (%) EBITDA Margin (%)	21.7 31.8	13.3 28.6	15.3 27.2	11.6 28.1	12.1 28.1	21.6 28.5
EBIT Margin (%)	29.0	25.8	24.5	25.7	25.4	25.1
Payout ratio (%)	25.7	25.5	33.2	39.4	40.0	40.0
ROE (%)	27.4	25.7	24.9	23.8	23.4	24.8
Capex/sales (%)	4.5	5.4	5.6	3.7	3.6	3.1
	4.0	1.0	2.0	1.6	1.3	0.9
Capex/depreciation (x)	1.6	1.9				
Capex/depreciation (x) Net debt/equity (%) Net interest cover (x)	-61.5 nm	-54.9 nm	-54.6 nm	-56.1	-60.2 nm	-66.5 nm



Wipro – Weak positioning; downgrading to Hold

Delivery quality issues hurt growth

Geographical diversification key to success

We downgrade Wipro to Hold with a revised target price of INR610. Wipro scores poorly on parameters like (a) strategic vendor partnerships and (b) investment for geographic diversification. In addition, delivery quality issues will limit opportunities for (a) moving up the value chain and/or (b) participation in new technology (SMAC) deals/initiatives of customers. Like Infosys, there is an urgent need for Wipro to improve its global presence and stem attrition. We expect Wipro to deliver 12.3% USD revenue CAGR over FY14-20E.

Failed to capitalise on the opportunity in Continental Europe

Over the past two years, Wipro has been unable to capitalise on the opportunity from the surge in offshore IT service adoption by Continental European customers. Despite a long experience in Japan, its positioning in the market remains weak (see Figure 35). Given this backdrop, we expect Wipro's geographical revenue contribution between Americas, Europe, and Asia Pacific to be 43:31:26 in FY20E vs. the current 50:29:21.

Rupee weakness to partially offset margin headwinds

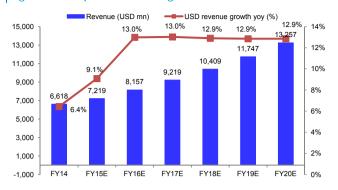
Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, and (c) higher SG&A expenses and pricing and volume pressure on traditional business due to potential cloud adoption can be margin dilutive. However, the prolonged rupee weakness will likely help limit margin decline. Given the known revenue headwinds, we believe Wipro will maintain a tight leash on its employee costs, which will be reflected in better utilisation (utilisation including trainees to improve from 66% in FY14 to 84% in FY20E). We expect Wipro EBIT margin to be around 19-21% over FY15-17E and 17-18.5% over FY18-20E (see Figure 65). Our model assumes INR/USD rates of 60-64 (see Figure 4).

Business turnaround still not complete

Under the leadership of TK Kurian and based on its new organisational structure, Wipro is trying to make the transition from being a vendor that provides merely labour arbitrage to one that adds value. However, Wipro's transition has been sluggish. Moreover, like Infosys, Wipro is likely to lose business from existing clients, which will put pressure on its growth rates. To improve positioning, customers believe Wipro should have one brand for traditional IT services and another for selling higher value-add services.

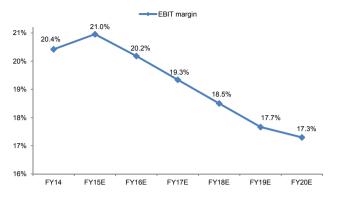


Figure 64: Wipro – Revenue growth trend



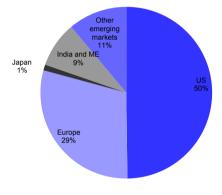
Source: Company data, Deutsche Bank

Figure 65: Wipro – EBIT margin trend



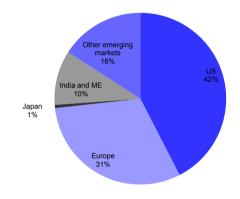
Source: Company data, Deutsche Bank

Figure 66: Wipro – FY14 revenue contribution by geography



Source: Company data, Deutsche Bank

Figure 67: Wipro – FY20E revenue contribution by geography



Source: Company data, Deutsche Bank estimates

Key highlights from our recent customer conversations

Key positives:

- Wipro has some good offerings, but the company is struggling to bring them to customers.
- Leadership changes at Wipro have resulted in improved messaging by the company. However, delivery quality still trails peers.
- Wipro has started to offer "outcome-based" solutions. While the sales pitch is impressive, customers' experience with execution has been poor, and hence there is a reluctance to engage.

Key negatives:

- Still focusing on business from traditional services. It is not widely considered for higher value-add services.
- Lower quality and changes in client engagement partners have resulted in a loss of business from existing clients.
- Middle management lacks depth.
- Consulting and other services are not sold as different propositions.



Changes in estimates

Figure 68:	Changes t	to key	forecasts.	an a	ssumptions
rigule oo.	Changes	LO KEY	101664313	anc	issumptions

Wipro		-2015E			-2016E			-2017E		CAGR
	New	Old	Change	New	Old	Change	New	Old	Change	FY15-17
INR/USD assumption	61.35	60.44	1.5%	60.33	58.96	2.3%	60.54	57.79	4.8%	-0.7%
IT services revenue (USDm)	6,770	7,219	-6.2%	7,427	8,246	-9.9%	8,407	9,466	-11.2%	11.4%
(INRm)										
Revenue	472,037	472,037	0.0%	538,706	532,833	1.1%	624,252	606,188	3.0%	15.0%
Total expenses	360,870	360,870	0.0%	416,421	405,124	2.8%	488,791	459,742	6.3%	16.4%
EBITDA	111,167	111,167	0.0%	122,285	127,709	-4.2%	135,461	146,446	<i>-7.5%</i>	10.4%
Other income	13,074	13,074	0.0%	13,822	13,822	0.0%	14,623	14,623	0.0%	5.8%
EBIT	98,910	98,910	0.0%	108,716	114,140	-4.8%	120,727	131,712	-8.3%	10.5%
Interest and Finance	2,493	2,493	0.0%	1,232	1,232	0.0%	1,232	1,232	0.0%	-29.7%
Depreciation	12,256	12,256	0.0%	13,569	13,569	0.0%	14,734	14,734	0.0%	9.6%
Profit Before Tax	109,492	109,492	0.0%	121,306	126,731	-4.3%	134,118	145,103	-7.6%	10.7%
Tax	25,402	25,402	0.0%	27,665	28,903	-4.3%	30,587	33,093	-7.6%	9.7%
Profit After Tax	86,478	86,478	0.0%	93,038	97,199	-4.3%	102,864	111,290	<i>-7.6%</i>	9.1%
EPS	35.05	35.05	0.0%	37.71	39.40	-4.3%	41.69	45.11	<i>-7.6%</i>	9.1%
Margins			bps			bps			bps	
EBITDA margin	23.6%	23.6%	0	22.7%	24.0%	-127	21.7%	24.2%	-246	
EBIT margin	20.95%	20.95%	0	20.2%	21.4%	-124	19.3%	21.7%	-239	
Recurring PAT margin	18.3%	18.3%	0	17.3%	18.2%	-97	16.5%	18.4%	-188	
Effective tax rate Source: Deutsche Bank estimates	23.2%	23.2%	0	22.8%	22.8%	-0	22.8%	22.8%	-0	

Valuation

Our 12-month target price on Wipro is based on 15x FY16 PE (vs. 16xFY16E earlier). We believe this target PE is appropriate based on forecast earnings CAGR of 9% over FY15-17E and is supported by relative historical/peer multiple trading levels.

Figure 69: Wipro – 1 year forward PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP.

Figure 70: Wipro 1 year forward PE vs. Sensex PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP.



Risks

We identify four industry-level risks: (1) rupee appreciation, (2) a protracted global economic slowdown, (3) aggressive steps by global vendors to adopt the offshore model leading to competition for clients as well as for employees, and (4) increasing wage inflation with supply-side (employees) issues. For Wipro, the key risks remain that of beefing up its enterprise IT (especially BFSI) portfolio, executing well on the turnaround of the BPO business, and integrating its various acquisitions.

Key upside risks: (1) improvement in delivery quality and share gains with top customers. (2) Higher than expected rupee depreciation and (c) productivity gains aid operating margins.



Model updated:03 N	lovember	2014
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Running the numbers	
Asia	
India	
Software & Services	

Wipro

Reuters: WIPR.BO Bloomberg: WPRO IN

Hold

1	
Price (1 Dec 14)	INR 593.00
Target Price	INR 610.00
52 Week range	INR 481.00 - 617.30
Market Cap (m)	INRm 1,444,203
	USDm 23,295

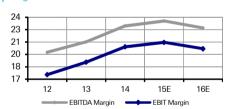
Company Profile

Wipro Limited specializes in IT and computer related technologies. The Group's services encompass a number of areas, including software architecture, business intelligence systems, e-commerce, data warehousing, Internet access devices, network management, system administration, messaging systems, IT consulting and design. Wipro also has subsidiary businesses that sell soaps and vegetable oils.

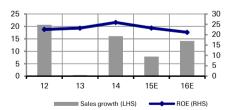
Price Performance



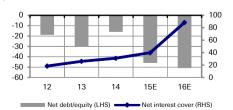
Margin Trends



Growth & Profitability



Solvency



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Financian and 21 Mar	0010	0010	0014	00155	00105
Fiscal year end 31-Mar	2012	2013	2014	2015E	2016E
Financial Summary	22.89	0E 40	22.20	OF 74	20.45
DB EPS (INR) Reported EPS (INR)	22.89	25.46 25.46	32.38 32.38	35.74 35.74	38.45 38.45
DPS (INR)	6.00	7.00	8.00	8.00	8.00
BVPS (INR)	110.9	109.1	141.0	167.5	196.6
Weighted average shares (m)	2,435	2,435	2,435	2,435	2,435
Average market cap (INRm) Enterprise value (INRm)	980,131 852,933	948,513 769,987	1,127,190 1,012,782	1,444,203 1,224,015	1,444,203 1,167,878
	032,033	700,007	1,012,702	1,224,010	1,107,070
Valuation Metrics P/E (DB) (x)	17.6	15.3	14.3	16.6	15.4
P/E (Reported) (x)	17.6	15.3	14.3	16.6	15.4
P/BV (x)	3.96	4.01	3.86	3.54	3.02
FCF Yield (%)	7.9	12.4	nm	8.9	5.5
Dividend Yield (%)	1.5	1.8	1.7	1.3	1.3
EV/Sales (x) EV/EBITDA (x)	2.3 11.5	2.0 9.7	2.3 10.1	2.6 11.0	2.2 9.6
EV/EBIT (x)	13.3	11.0	11.3	12.4	10.7
Income Statement (INRm)					
Sales revenue	375,217	376,882	437,639	472,037	538,706
Gross profit	121,027	125,436	152,395	167,020	185,684
EBITDA	74,111	79,191	100,469	111,167	122,285
Depreciation Amortisation	10,130	9,219	11,106	12,256	13,569
Amortisation EBIT	0 63,981	0 69,972	0 89,363	0 98,910	0 108,716
Net interest income(expense)	-3,491	-2,693	-2,891	-2,493	-1,232
Associates/affiliates	124	0	0	0	0
Exceptionals/extraordinaries Other pre-tax income/(expense)	0 8,895	0 11,317	0 14,544	0 16,035	0 13,822
Profit before tax	69,385	78,596	101,016	112,452	121,306
Income tax expense	13,762	16,912	22,601	25,402	27,665
Minorities Other post-tax income/(expense)	-8 0	-333 0	-438 0	0	0
Net profit	55,755	62,017	78,853	87,050	93,641
DB adjustments (including dilution)	0	0	0	0	0
DB Net profit	55,755	62,017	78,853	87,050	93,641
Cash Flow (INRm)					
Cash flow from operations	103,424	103,299	-14,461	142,667	94,567
Net Capex	-25,821	14,573	-48,657	-14,157	-15,669
Free cash flow Equity raised/(bought back)	77,603 0	117,872 0	-63,118 0	128,510 0	78,898 0
Dividends paid	-16,483	-19,230	-19,230	0	0
Net inc/(dec) in borrowings	0	0	0	0	0
Other investing/financing cash flows Net cash flow	0 61,120	0 98,642	-82,348	0 128,510	0 78,898
Change in working capital	0	0	0	0	0
Balance Sheet (INRm)					
Cash and other liquid assets	77,666	84,838	116,877	249,725	306,465
Tangible fixed assets	59,860	49,747	67,680	69,581	71,681
Goodwill/intangible assets	67,961	54,282 98,699	73,900	73,900 34,060	73,900
Associates/investments Other assets	76,776 150,043	148,645	60,557 183,290	186,270	34,060 210,481
Total assets	432,306	436,211	502,304	613,536	696,586
Interest bearing debt Other liabilities	26,395	3,840	61,639	61,639	61,639
Total liabilities	134,889 161,284	165,554 169,394	95,779 157,418	142,120 203,759	153,688 215,327
Shareholders' equity	270,173	265,646	343,499	407,819	478,698
Minorities	849	1,171	1,387	1,959	2,561
Total shareholders' equity Net debt	271,022 - <i>51,271</i>	266,817 <i>-80,998</i>	344,886 <i>-55,238</i>	409,777 - <i>188,086</i>	481,259 - <i>244,826</i>
Key Company Metrics	01,271	00,000	00,200	700,000	244,020
Sales growth (%)	20.7	0.4	16.1	7.9	14.1
DB EPS growth (%)	4.2	11.2	27.1	10.4	7.6
EBITDA Margin (%)	19.8	21.0	23.0	23.6	22.7
EBIT Margin (%)	17.1	18.6	20.4	21.0	20.2
Payout ratio (%) ROE (%)	26.2 22.5	27.5 23.1	24.7 25.9	22.4 23.2	20.8 21.1
Capex/sales (%)	6.9	0.0	11.1	3.0	2.9
Capex/depreciation (x)	2.5	0.0	4.4	1.2	1.2
Net debt/equity (%) Net interest cover (x)	-18.9 18.3	-30.4 26.0	-16.0 30.9	-45.9 39.7	-50.9 88.2
Source: Company data, Deutsche Bank estimates		20.0	55.5	55.7	
Gourge. Company data, Dediscrie Bank estimales					



HCL Tech – Pricing pressure in the offing; maintaining Sell

Lopsided service portfolio

laaS adoption to affect operating margins sharply

HCL Tech's service portfolio is skewed toward IMS (infrastructure management services). This raises concerns on its ability to (a) cross sell other services – software and services and BPO and (b) counter intense price competition and consolidation, which will pressure IMS price points. Thus, at an 11% CAGR over FY14-20E, we expect HCL Tech to report the lowest revenue growth versus its top-tier peers. Consequently, it will also witness the most operating margin erosion. We reiterate our Sell rating with a target price of INR1,230.

Limited success at cross selling other services hurts growth potential

HCL Tech has a strong presence in Europe. Most of this is due to its dominant positioning in IMS, which was the key spending area for outsourcers from Europe looking to cut costs and drive efficiency. We believe that its weakness in software and services (60% of revenues) and BPO (5% of revenues) will limit any further upside for HCL Tech not only in penetrating Europe further but also in diversifying its geographical exposure. We thus expect HCL Tech's FY20E revenue contribution from North America, Europe, and Asia to be 54:37:9 versus the current 54:34:12 (see Figure 73 and Figure 74).

Rupee weakness to partially offset margin headwinds

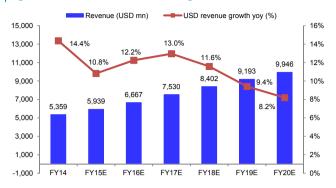
Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, and (c) higher SG&A expenses and pricing and volume pressure on traditional business due to potential cloud adoption, especially laaS, can be margin dilutive. However, the prolonged rupee weakness will likely help limit margin decline. We expect HCL Tech's EBIT margin to be around 22-23% over FY15-17E and 19-21% over FY18-20E (see Figure 72). Our model assumes INR/USD rates of 60-65 (see Figure 4).

Stands out for its IMS offerings

Among the Indian vendors, HCL Tech stands out for its IMS offering. However, despite the acquisition of Axon, which significantly enhanced HCL Tech's SAP capability in Europe, it trails peers such as Infosys in this market. Also, with respect to commoditised services like ADMS (application development and maintenance services), TCS, Cognizant, and Infosys are preferred by customers. With only IMS finding favour with customers and an inability to cross-sell other services, we expect to see a continuation of IMS-driven lopsided revenue growth at HCL Tech.

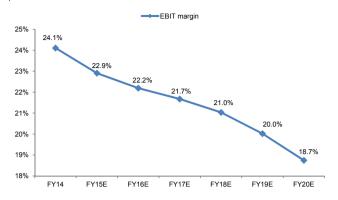


Figure 71: HCL Tech - Revenue growth trend



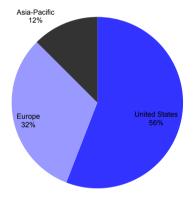
Source: Deutsche Bank estimates

Figure 72: HCL Tech – EBIT margin trend



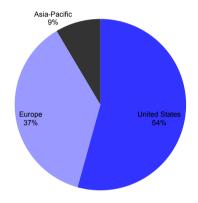
Source: Deutsche Bank estimates

Figure 73: HCL Tech – FY14 revenue contribution by geography



Source: Deutsche Bank; Company data

Figure 74: HCL Tech – FY20E revenue contribution by geography



mpany data Source: Deutsche Bank estimates

Key highlights from our recent customer conversations

Key positives

- Gains due to vendor consolidation. Provides contractual flexibility. Like the 'can do' attitude. However, performance on individual projects can be patchy.
- HCL is partnering well with CSC. Stitched together a partnership and offered a new standard to the market solutions.
- Has a good presence in Europe
- Extremely strong IMS capability

Key negatives

- Service delivery quality is patchy, and the company cannot cross sell services.
- Commercially very savvy and aggressive deal maker



Changes in estimates

Figure 75: Changes to key forecasts and assumptions

HCL Technologies		2015E			2016E			2017E		CAGR
	New	Old	Change	New	Old	Change	New	Old	Change	FY15/17E
INR/USD assumption	60.13	59.99	0.2%	60.55	58.65	3.2%	61.52	57.49	7.0%	1.1%
Revenue (USDm)	5,939	5,939	0.0%	6,667	6,667	0.0%	7,530	7,530	0.0%	12.6%
(INRm)										
Gross revenue	357,150	356,319	0.2%	403,659	391,006	3.2%	463,306	432,906	7.0%	13.9%
Direct cost	225,039	224,629	0.2%	256,443	250,136	2.5%	297,707	282,503	5.4%	15.0%
Gross profit	132,111	131,691	0.3%	147,216	140,869	4.5%	165,599	150,402	10.1%	12.0%
SG&A	43,397	43,295	0.2%	48,847	45,459	7.5%	55,066	47,667	15.5%	12.6%
EBITDA	88,714	88,395	0.4%	98,369	95,410	3.1%	110,533	102,735	7.6%	11.6%
Dep and Amortisation	6,908	6,889	0.3%	8,796	8,520	3.2%	10,125	9,461	7.0%	21.1%
EBIT	81,806	81,506	0.4%	89,573	86,890	3.1%	100,408	93,274	7.6%	10.8%
Interest and other income	6,277	6,267	0.2%	3,213	3,104	3.5%	3,264	3,043	7.3%	-27.9%
Foreign exchange	-530	-530		0	0		0	0		
Profit Before Tax	87,554	87,242	0.4%	92,786	89,995	3.1%	103,672	96,317	7.6%	8.8%
Prov for Income Tax	18,817	18,750	0.4%	19,873	19,275	3.1%	22,205	20,629	7.6%	8.6%
Profit After Tax	68,737	68,492	0.4%	72,913	70,719	3.1%	81,468	75,688	7.6%	8.9%
Minority Interest	5	5		0	0		0	0		
Net Income	68,732	68,487	0.4%	72,913	70,719	3.1%	81,468	75,688	7.6%	8.9%
EPS	95.68	95.97	-0.3%	100.61	98.88	1.7%	111.42	105.59	5.5%	7.9%
Cost ratios			bps			bps			bps	
Direct cost	63.0%	63.0%	-3	63.5%	64.0%	-44	64.3%	65.3%	-100	
SG&A	12.2%	12.2%	0	12.1%	11.6%	47	11.9%	11.0%	87	
Key ratios										
Gross margin	37.0%	37.0%	3	36.5%	36.0%	44	35.7%	34.7%	100	
EBITDA margin	24.8%	24.8%	3	24.4%	24.4%	-3	23.9%	23.7%	13	
EBIT margin	22.9%	22.9%	3	22.2%	22.2%	-3	21.7%	21.5%	13	
PAT margin Source: Deutsche Bank estimates	19.2%	19.2%	2	18.1%	18.1%	-2	17.6%	17.5%	10	

Valuation

We value Indian IT service firms on a PE basis relative to their historical trading range in relation to peers as well as growth rates. We value HCL Tech at 12x FY15 PE, supported by an earnings CAGR of 5% (FY15-17E). Given (a) the lopsided revenue growth profile, (b) expected revenue growth underperformance vs. Infosys, and (c) headwinds to margins, we value HCL Tech at a discount to Infosys. Our target P/E multiple for HCL Tech is now at a 30% discount to Infosys, in line with its average historical discount.



Figure 76: HCL Tech – 1 year forward PE

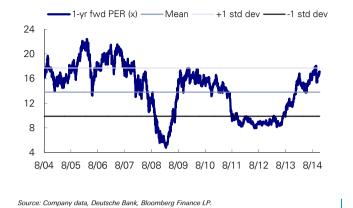


Figure 77: HCL Tech 1 year forward PE vs. Sensex PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP.

Risks

We identify three key upside risks to our call: a) ramp-ups in the near term in IMS beyond our estimates. This could happen from uneven ramp-ups of deals won in the past few quarters. b) Further currency appreciation could give room for HCL Tech to increase margins beyond current levels. Margins could also vary if HCL Tech chooses to cut down on its SG&A spends in the immediate term. c) Further improvement in the macro and spend environment could be a boost for the entire sector.



Model updated:03 N	lovember	2014
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Running the numbers	
Asia	
India	
Software & Services	

HCL Tech

Reuters: HCLT.BO Bloomberg: HCLT IN

Sell

Price (1 Dec 14)	INR 1,670.00
Target Price	INR 1,230.00
52 Week range	INR 1,108.15 - 1,749.30
Market Cap (m)	INRm 1,153,970
	USDm 18,614

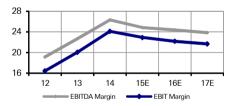
Company Profile

HCL Technologies Limited provides software development and related engineering services. The Group's technologies utilize a variety of technologies, including Internet and e-commerce, networking, internet telephony, embedded software, ASIC/VLSI design and testing, satellite and wireless communications, and component based object technologies, including COM, DCOM and COBRA.

Price Performance



Margin Trends



Growth & Profitability



Solvency

Fiscal year end 30-Jun	2012	2013	2014	2015E	2016E	2017E
Financial Summary						
DB EPS (INR)	36.36	58.01	89.47	95.89	101.72	113.66
Reported EPS (INR)	36.36	58.01	89.47	95.89	101.72	113.66
DPS (INR)	8.00	8.00	8.00	8.00	8.00	8.00
BVPS (INR)	153.5	205.7	287.2	378.0	475.6	585.5
Weighted average shares (m)	699	696	699	702	702	702
Average market cap (INRm)	306,859	450,757	852,986	1,153,970	1,153,970	1,153,970
Enterprise value (INRm)	297,688	407,328	760,341	990,508	922,667	846,298
Valuation Metrics						
P/E (DB) (x)	12.1	11.2	13.6	17.4	16.4	14.7
P/E (Reported) (x)	12.1	11.2 3.77	13.6 5.20	17.4	16.4	14.7
P/BV (x)	3.06			4.42	3.51	2.85
FCF Yield (%)	2.4	8.8	6.5	6.4	6.2	6.9
Dividend Yield (%)	1.8	1.2	0.7	0.5	0.5	0.5
EV/Sales (x)	1.4	1.6	2.3	2.8	2.3	1.8
EV/EBITDA (x)	7.4	7.0	8.8	11.2	9.4	7.7
EV/EBIT (x)	8.6	7.9	9.6	12.1	10.3	8.4
Income Statement (INRm)						
Sales revenue	210,312	257,336	329,180	357,150	403,659	463,306
Gross profit	69,754	92,557	127,020	132,111	147,216	165,599
EBITDA	40,251	58,356	86,670	88,714	98,369	110,533
Depreciation	5,640	6,726	7,320	6,908	8,796	10,125
Amortisation EBIT	0	0 E1 620	70.250	0 81,806	0 89,573	0 100,408
Net interest income(expense)	34,611 0	51,630 0	79,350 0	0 1,806	09,573	100,408
Associates/affiliates	-4	0	0	0	0	0
Exceptionals/extraordinaries	0	0	0	0	0	Ö
Other pre-tax income/(expense)	-1,170	1,571	-160	5,747	3,213	3,264
Profit before tax	33,441	53,201	79,190	87,554	92,786	103,672
Income tax expense	8,180	12,217	15,480	18,817	19,873	22,205
Minorities	0	0	0	0	0	0
Other post-tax income/(expense) Net profit	25,257	40,984	63,710	68,737	72,913	81,468
·			•	-	•	•
DB adjustments (including dilution) DB Net profit	0 25,257	0 40,984	0 63,710	0 68,737	0 72,913	0 81,468
	25,257	40,304	03,710	00,737	72,313	01,400
Cash Flow (INRm)						
Cash flow from operations	23,286	49,021	68,471	85,842	84,746	94,614
Net Capex	-15,776	-9,412	-13,412	-10,584	-12,472	-13,801
Free cash flow	7,510	39,609 0	55,059 0	75,259 0	72,274 0	80,812
Equity raised/(bought back) Dividends paid	0 -2,968	-2,968	-2,968	-2,968	-2,968	0 -2,968
Net inc/(dec) in borrowings	-2,018	-12,262	549	-909	-2,300	-2,500
Other investing/financing cash flows	0	0	0	0	0	0
Net cash flow	2,524	24,379	52,640	71,382	69,306	77,844
Change in working capital	-6,410	3,843	-950	11,404	113	232
Balance Sheet (INRm)						
Cash and other liquid assets	27,996	49,889	99,998	169,911	237,747	314,121
Tangible fixed assets	24,775	27,283	31,465	35,141	38,817	42,493
Goodwill/intangible assets	49,404	49,582	51,492	51,492	51,492	51,492
Associates/investments	397	500	156	156	156	156
Other assets	86,704	103,227	121,793	139,085	152,963	171,724
Total assets	189,276	230,481	304,904	395,785	481,176	579,987
Interest bearing debt Other liabilities	19,222 62,740	6,960	7,509	6,600 124,071	6,600	6,600
Total liabilities	81,962	80,574 87,534	96,581 104,090	130,671	140,986 147,586	162,768 169,368
Shareholders' equity	107,314	142,945	200,814	265,108	333,584	410,614
Minorities	0	0	0	5	0	5
Total shareholders' equity	107,314	142,945	200,814	265,113	333,584	410,619
Net debt	-8,774	-42,929	-92,489	-163,311	-231,147	-307,521
Key Company Metrics						
Sales growth (%)	32.7	22.4	27.9	8.5	13.0	14.8
DB EPS growth (%)	53.9	59.5	54.2	7.2	6.1	11.7
EBITDA Margin (%)	19.1	22.7	26.3	24.8	24.4	23.9
EBIT Margin (%)	16.5	20.1	24.1	22.9	22.2	21.7
Payout ratio (%)	22.1	13.6	8.8	8.2	7.7	6.9
ROE (%)	26.4	32.8	37.1	29.5	24.4	21.9
Capex/sales (%) Capex/depreciation (x)	7.5 2.8	3.7 1.4	4.1 1.8	3.0 1.5	3.1 1.4	3.0 1.4
Net debt/equity (%)	-8.2	-30.0	-46.1	-61.6	-69.3	-74.9
Net interest cover (x)	nm	nm	nm	nm	nm	nm

Source: Company data, Deutsche Bank estimates

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Tech Mahindra – Share gains drive further upside potential

Significant improvement in customer intimacy

Secular business turnaround play

Tech Mahindra gains from the twin advantages of (a) sales aggression of the telecom business and (b) strong client relationships in the enterprise business (Satyam). Commendable improvement in the quality of delivery and significantly better balance sheet (net cash of USD600m) forms the base of Tech Mahindra's business turnaround and above industry average growth rates. This has led to (1) share gains in spending from existing customers (AT&T, GE – largest customer of Satyam, BASF, GSK, Sony, etc.) and (2) strong deal signings from new customers (KPN, Vodafone, Volvo, Microsoft, UBS, etc.). We expect TechM to deliver 18% USD revenue CAGR over FY14-20E.

Share gains in North America and Europe

We believe the robust balance sheet, competitive pricing, and expanding service footprint by leveraging Satyam's relationships should help the company gain share versus peers. Thus, contrary to its other large-cap peers, we expect Tech Mahindra's revenue contribution from North America to improve. We thus expect its FY20E USD revenue contribution from North America, Europe, and Asia to be 46:35:19 versus the current 45:32:23 (see Figure 80 and Figure 81).

Rupee weakness to partially offset margin headwinds

Investment in new geographies in the form of (a) adding local workforce, (b) nearshore development centres, and (c) higher SG&A expenses and pricing and volume pressure on traditional business due to potential cloud adoption, especially laaS, can be margin dilutive. However the prolonged rupee weakness will likely help limit margin decline. We expect Tech Mahindra's EBIT margin to be around 17-17.5% over FY15-17E and 15-16.5% over FY18-20E (see Figure 79). Our model assumes INR/USD rates of 60-65 (see Figure 4).

High customer satisfaction and increasing share with existing customers

The potential for market share gains following the merger with Satyam is one of the key reasons for our positive view on Tech Mahindra. Our interaction with customers provided us with enough evidence to support our view. While the company has strengthened its positioning with its large existing customers, it is also steadily winning business from new customers, interestingly even in weak verticals such as banking, financial services, and insurance.



Figure 78: Tech Mahindra – Revenue growth trend



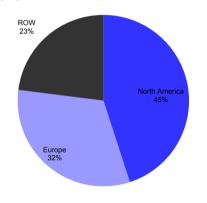
Source: Company data. Deutsche Bank estimates

Figure 79: Tech Mahindra – EBIT margin trend



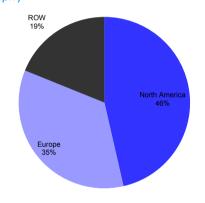
Source: Company data, Deutsche Bank estimates

Figure 80: Tech Mahindra – FY14 revenue contribution by geography



Source: Deutsche Bank; Company data

Figure 81: Tech Mahindra – FY20E revenue contribution by geography



Source: Deutsche Bank estimates

Key highlights from our recent customer conversations

Key positives:

- Satyam was a very good transformation. Has done a great job at improving the quality of delivery.
- Sticking with Satyam paid off "we knew that the fraud must have been the work of an individual, not of a company."
- Tech Mahindra does one of the best jobs at business relationship management.
- Has successfully leveraged client references to win new business.

Key negatives:

Still lacks the breadth of services of a Tier I IT services vendor.



Changes in estimates

Figure 82: Changes in key	forecasts	and assu	mptions							
Tech Mahindra		FY15E			FY16E			FY17E		CAGR
(INRm)	New	Old	Variance	New	Old	Variance	New	Old	Variance	FY15/FY1.
Revenue (USDm)	3,700	3,690	0.3%	4,526	4,527	0.0%	5,348	5,351	-0.1%	20.2%
INR/USD	60.1	60.1	0.0%	60.3	58.9	2.3%	61.3	57.8	6.1%	1.0%
Revenue from services	222,449	221,842	0.3%	272,966	266,798	2.3%	327,727	309,155	6.0%	21.4%
Cost of services	143,044	141,247	1.3%	171,352	168,187	1.9%	208,145	198,461	4.9%	20.6%
Gross profit	79,404	80,595	-1.5%	101,614	98,611	3.0%	119,582	110,695	8.0%	22.7%
SG&A	34,547	35,777	-3.4%	47,620	46,542	2.3%	57,358	54,104	6.0%	28.9%
Operating Profit	44,858	44,817	0.1%	53,994	52,069	3.7%	62,224	56,590	10.0%	17.8%
Other Income	4,111	4,670	-12.0%	8,709	8,644	0.8%	11,535	11,399	1.2%	67.5%
Interest Expense	164	164	0.0%	164	164	0.0%	164	164	0.0%	0.0%
Depreciation	5,982	6,049	-1.1%	6,598	6,506	1.4%	7,224	6,962	3.8%	9.9%
Profit before tax	42,822	43,275	-1.0%	55,941	54,043	3.5%	66,371	60,864	9.0%	24.5%
Provision for Taxes	10,366	10,794	-4.0%	13,301	12,859	3.4%	15,916	14,633	8.8%	23.9%
Profit after tax before exceptional items	32,456	32,481	-0.1%	42,641	41,184	3.5%	50,454	46,231	9.1%	24.7%
Minority interest	-316	-149	112.7%	-469	-188	148.7%	-555	-212		32.5%
Profit after Tax	32,140	32,333	-0.6%	42,172	40,995	2.9%	49,899	46,019	8.4%	24.6%
EPS										
Basic	154.24	155.16	-0.6%	202.38	196.74	2.9%	239.47	220.85	8.4%	24.6%
Diluted	150.42	151.32	-0.6%	197.37	191.87	2.9%	233.54	215.38	8.4%	24.6%
Margins										
Gross margins	35.7%	36.3%	-63	37.2%	37.0%	26	36.5%	35.8%	68	
EBITDA margin	20.2%	20.2%	-4	19.8%	19.5%	26	19.0%	18.3%	68	
EBIT margin	17.5%	17.5%	0	17.4%	17.1%	29	16.8%	16.1%	73	
PAT margin	14.4%	14.6%	-13	15.4%	15.4%	8	15.2%	14.9%	34	
Revenue by key client (USDm)										
Telecom (TechM standalone)	1687	1682	0.3%	1910	1911	-0.1%	2135	2139	-0.2%	
ВТ	333	333	0.0%	314	314	0.0%	297	297	0.0%	-5.5%
HBS	168	168	0.0%	168	168	0.0%	168	168	0.0%	0.0%
Comviva	85	85	0.0%	96	96	0.0%	108	108	0.0%	12.6%
KPN	140	140	0.0%	200	200	0.0%	200	200	0.0%	69.0%
Others	956	956	0.0%	1131	1133	-0.1%	1363	1366	-0.3%	16.4%
Enterprise business (Satyam)	2024	2024	0.0%	2616	2616	0.0%	3212	3212	0.0%	26.7%
Total	3711	3706	0.1%	4526	4527	0.0%	5348	5351	-0.1%	20.2%
Proportion of revenues from key clients										
Telecom (TechM standalone)	45.5%	45.4%	7	42.2%	42.2%	-2	39.9%	40.0%	-4	-572
BT	9.0%	9.0%	-1	6.9%	6.9%	0	5.6%	5.6%	0	-430
HBS	4.5%	4.5%	-1	3.7%	3.7%	0	3.1%	3.1%	0	-165
Comviva	2.3%	2.3%	0	2.1%	2.1%	0	2.0%	2.0%	0	-30
KPN	3.8%	3.8%	-1	4.4%	4.4%	0	3.7%	3.7%	0	218
Others	25.8%	25.8%	-3	25.0%	25.0%	-2	25.5%	25.5%	-5	-166
Enterprise business (Satyam)	54.5%	54.6%	-7	57.8%	57.8%	2	60.1%	60.0%	4	572
Total	100.0%	100.0%	0	100.0%	100.0%	0	100.0%	100.0%	0	0
Source: Deutsche Bank estimates										



Valuation

We expect Tech Mahindra to deliver USD revenue CAGR of 20.3% over FY15-17E and an earnings CAGR of 19.3% over the same period. Our FY15E EPS for the merged entity is INR150.4. We value TechM on a one-year forward PE basis (in line with the valuation methodology adopted for the rest of the stocks in the sector). Strong deal signings and share gains have ensured that, despite the cessation of revenue amortisation from top client BT in 4QFY14, TechM has maintained a healthy revenue growth rate. This addresses any concerns about a drop in the company's revenue momentum. In addition, the drop in revenue from BT has not adversely impacted the operating margins significantly. This provides the ideal setting for its PE rerating to continue. Our target price is hence based on a PE of 17.5x FY16E (17.5x FY15E/09 earlier) earnings (PEG of 0.8).

Figure 83: Tech M – 1 year forward PE

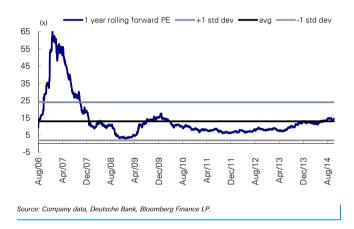
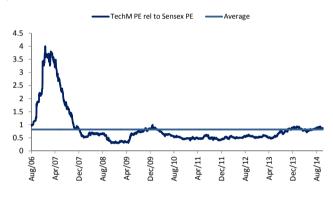


Figure 84: Tech M – 1 year forward PE vs. Sensex PE



Source: Company data, Deutsche Bank, Bloomberg Finance LP.

Risks

Key risks for Tech Mahindra: 1) high vertical and client concentration, with ~50% of revenues coming from the telecom vertical and, within that, c20% of revenues from a single client (BT); 2) currency fluctuation risk, with the bulk of earnings coming from exports; 3) a potential global slowdown, which could lead to project deferrals or reduced growth rates; and 4) liabilities from suits filed against the erstwhile Satyam.



Model	updated:03	November	2014
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Running the numbers
Asia
India

Software & Services

Tech Mahindra Ltd

Reuters: TEML.BO Bloomberg: TECHM IN

Buy

Price (1 Dec 14)	INR 2,658.45
Target Price	INR 3,500.00
52 Week range	INR 1,670.15 - 2,719.00
Market Cap (m)	INRm 641,180
	USDm 10,342

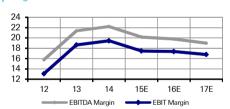
Company Profile

Tech Mahindra Limited is an India-based company that provides information technology (IT) services and solutions to the global telecommunications industry. The Company's service offerings include business process outsourcing, infrastructure management services and value-added services. As a result of its longstanding relationship with BT, the company has an established presence in the European market.

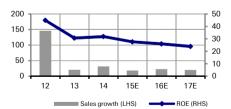
Price Performance



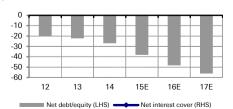
Margin Trends



Growth & Profitability



Solvency



Aniruddha Bhosale +91 22 7180 4037

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Fiscal year end 31-Mar	2012	2013	2014	2015E	2016E	2017E
Financial Summary						
DB EPS (INR)	89.80	92.23	125.53	150.42	197.37	233.54
Reported EPS (INR)	89.80	92.23	125.53	150.42	197.37	233.54
DPS (INR)	2.18	2.19	2.23	2.23	2.23	2.23
BVPS (INR)	244.4	364.1	440.6	679.1	881.3	1,124.9
Weighted average shares (m)	210	210	208	208	208	208
Average market cap (INRm)	136,531	179,817	295,402	641,180	641,180	641,180
Enterprise value (INRm)	108,597	141,535	247,711	563,902	529,275	486,270
Valuation Metrics						
P/E (DB) (x)	7.2	9.3	11.3	17.7	13.5	11.4
P/E (Reported) (x)	7.2	9.3	11.3	17.7	13.5	11.4
P/BV (x)	2.94	2.91	4.07	3.91	3.02	2.36
FCF Yield (%)	7.8	12.3	17.9	5.8	11.1	13.4
Dividend Yield (%)	0.3	0.3	0.2	0.1	0.1	0.1
EV/Sales (x)	0.9	1.0	1.3	2.5	1.9	1.5
EV/EBITDA (x)	5.8	4.6	5.9	12.6	9.8	7.8
EV/EBIT (x)	7.0	5.3	6.8	14.5	11.2	8.8
Income Statement (INRm)						
	440.050	4.40.000	100.010	000 440	070.000	007.707
Sales revenue Gross profit	118,853 42,483	143,320 53,313	188,313 71,312	222,449 79,404	272,966 101,614	327,727 119,582
EBITDA	18,729	30,631	41,836	44,858	53,994	62,224
Depreciation	3,191	3,896	5,221	5,982	6,598	7,224
Amortisation	0	0	0	0	0	0
EBIT	15,539	26,735	36,615	38,875	47,397	55,000
Net interest income(expense)	5,584	2,121	1,130	4,111	8,709	11,535
Associates/affiliates	0	0	0	0	0	0
Exceptionals/extraordinaries	2,689	-1,601	0	0	0	0
Other pre-tax income/(expense)	-934 20 199	-922	-797	-164	-164	-164
Profit before tax Income tax expense	20,188 3,884	27,934 6,479	36,948 9,790	42,822 10,366	55,941 13,301	66,371 15,916
Minorities	-44	301	336	316	469	555
Other post-tax income/(expense)	0	0	0	0	0	0
Net profit	19,038	19,553	26,822	32,140	42,172	49,899
DB adjustments (including dilution)	0	0	0	0	0	0
DB Net profit	19,038	19,553	26,822	32,140	42,172	49,899
Cash Flow (INRm)						
	05.044	07.000	00.040	00.510	07.100	70.070
Cash flow from operations Net Capex	25,241 -14,651	27,982 -5,796	60,948 -8,051	36,519 -4,578	67,133 -5,871	79,972 -5,986
Free cash flow	10,590	22,187	52,898	31,941	61,262	73,986
Equity raised/(bought back)	66,695	6	-15,202	15,221	01,202	0
Dividends paid	-457	-460	-464	-464	-464	-464
Net inc/(dec) in borrowings	0	0	0	0	0	0
Other investing/financing cash flows	0	-8,946	0	830	0	0
Net cash flow	76,829	12,786	37,232	47,528	60,799	73,522
Change in working capital	<i>-4,756</i>	-8,425	9,325	-22,335	-8,238	-8,984
Balance Sheet (INRm)						
Cash and other liquid assets	30,936	34,582	33,202	71,811	106,438	149,443
Tangible fixed assets	18,237	20,136	22,966	21,561	20,834	19,596
Goodwill/intangible assets	353	4,811	5,640	4,811	4,811	4,811
Associates/investments	17,796	22,284	24,013	24,013	24,013	24,013
Other assets	52,438	68,486	73,575	111,433	136,296	159,515
Total assets	119,760	150,298	159,396	233,628	292,392	357,378
Interest bearing debt Other liabilities	20,648 47,634	17,240 55,259	8,086 58,053	17,240 73,576	17,240 90,202	17,240 104,437
Total liabilities	68,282	72,499	66,139	90,816	107,442	121,677
Shareholders' equity	51,329	76,455	91,819	141,506	183,643	234,394
Minorities	150	1,344	1,438	1,306	1,306	1,306
Total shareholders' equity	51,478	77,799	93,257	142,812	184,950	235,701
Net debt	-10,288	-17,341	-25,117	<i>-54,571</i>	-89,198	-132,203
Key Company Metrics						
Sales growth (%)	145.5	20.6	31.4	18.1	22.7	20.1
DB EPS growth (%)	40.3	20.6	31.4 36.1	18.1	31.2	18.3
EBITDA Margin (%)	15.8	21.4	22.2	20.2	19.8	19.0
EBIT Margin (%)	13.1	18.7	19.4	17.5	17.4	16.8
Payout ratio (%)	2.4	2.4	1.7	1.4	1.1	0.9
ROE (%)	44.9	30.6	31.9	27.5	25.9	23.9
Capex/sales (%)	12.3	4.0	4.3	2.1	2.2	1.8
Capex/depreciation (x)	4.6	1.5	1.5	0.8	0.9	0.8
Net debt/equity (%) Net interest cover (x)	-20.0 nm	-22.3 nm	-26.9 nm	-38.2 nm	-48.2 nm	-56.1 nm

Source: Company data, Deutsche Bank estimates

Net interest cover (x)



Appendix 1

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Buy: Based on a current 12- month view of total share-holder return (TSR = percentage change in share price from current price to projected target price plus pro-jected dividend yield), we recommend that investors buy the stock.

Sell: Based on a current 12-month view of total shareholder return, we recommend that investors sell the stock

Hold: We take a neutral view on the stock 12-months out and, based on this time horizon, do not recommend either a Buy or Sell.

Notes:

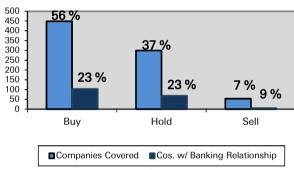
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Equity rating dispersion and banking relationships



Asia-Pacific Universe



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