IT Services

Digital services 101: assessing the market opportunity and vendor initiatives

Equities

Global
Software

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Digital services have reached critical mass; adoption to accelerate

The key debate among analysts and investors is whether digital services (ie, the confluence of Social, Mobile, Analytics and Digital [SMAC] technologies) have reached critical mass for faster adoption by enterprise IT users. At an estimated global market size of US$850bn, according to IBM, versus enterprise IT spending of US$3trn in 2017, according to Gartner, we believe digital services have reached critical mass and that there will be increased adoption by enterprises in the next three to five years. IT service vendors are accelerating investments to build capabilities and gain market share. As with past technology shifts, some companies are likely to benefit while others will lose out, and in this report we analyse vendor positioning.

New models could be deflationary; balance sheet leverage likely to increase

We think digital outsourcing models will be very different from legacy models with the increased adoption of on-demand/pay-per-use strategies. Such pricing models tend to be inherently deflationary on legacy revenue, and could impact incremental growth. A focus on business outcomes implies increased execution risk will be borne by vendors, while the shift to Cloud implies lower asset ownership for IT users, increasing user demand to transfer them to vendors' balance sheets. On the plus side, non-linearity of revenue is likely to increase, which could offset the commoditisation of legacy services.

Global vendors have built better capabilities; offshore vendors trailing

Accenture and Capgemini rank well in our proprietary ranking of digital services capabilities and revenue exposure. Eastern European vendors, EPAM and Luxoft, also rank well due to a better ability to move into digital and lower exposure to legacy services. Offshore vendors have higher exposure to legacy outsourcing that is more at risk of cannibalisation. TCS and Cognizant have invested aggressively, meriting higher rankings than other offshore vendors. Wipro remains in a weaker position, and we downgrade the stock from Buy to Sell and cut our price target from Rs660 to Rs520.

UBS digital service vendor rankings

Company	Rating	Price target	Market cap (US$ m)	Digital revenue (US$ m) 2013/FY14	Digital as % of revenue 2013/FY14	UBS Digital Services Rank (5 is the highest)
Accenture	Neutral	US$83	52,545	5,000	17%	5
ATOS	Buy	€67.5	6,726	860	8%	2
Capgemini	Buy	€61.5	10,778	1,650	12%	4
Cognizant	Buy	US$57	32,009	>500	6%	3
EPAM	Buy	US$54	2,267	<55	10%	4
HCL Tech	Neutral	Rs1,750	17,971	<350	7%	2
IBM	Neutral	US$165	179,124	7,400*	13%*	3.5
Infosys	Sell	Rs2,950	38,414	<500	<6%	2.5
Luxoft	Buy	US$44	1,261	<40	10%	4
TCS	Neutral	Rs2,700	82,849	700-850	5-7%	3
Tech Mahindra	Neutral	Rs2,830	9,919	<200	5%	1
Wipro	Sell	Rs520	22,260	<300	5%	1

* Global IT services only. Source: Company data, UBS estimates

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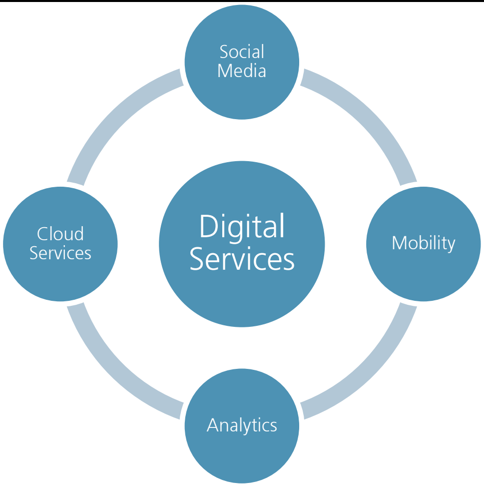
Executive Summary

Digital services come of age

Digital services, or SMAC, refer to a computing paradigm that is essentially a confluence of four different technology forces, namely: 1) Social Media; 2) Mobility; 3) Analytics; and 4) Cloud. We believe that digital service technologies have reached critical mass with large vendors like IBM and Accenture now reporting US$5bn-7.5bn in revenue from this segment. In this report, we analyse the market opportunity and vendor responses to this technology shift.

Figure 1: The confluence of technology forces driving digital services



Source: UBS

There are no reliable third-party analyst estimates for the digital services market at present given its nascent stage. IBM estimates digital market revenue at roughly US$850bn in 2017, with Mobility and Cloud revenue growing 19% and 25% annually. We expect digital services to eventually replace a significant part of the IT services market, with current technologies in systems integration, custom applications and BPO evolving in this direction in the next five to 10 years. In the absence of viable, third-party data, we view the growth in Cloud services as a good proxy for adoption rates in digital services. Gartner's estimates suggest a fairly high penetration of public Cloud services, which also indicates that digital services have attained critical mass.

Figure 2: Public Cloud penetration of IT services

	2013	2014E	2018E
Cloud Applications (US$ bn)	23	28	58
Total Applications (US$ bn)	225	232	269
Cloud as % of total	*10.0%*	*12.0%*	*21.4%*
Cloud Infrastructure Services	14	19	51
Total Infrastructure Services	443	455	524
Cloud as % of total	*3.2%*	*4.2%*	*9.7%*
Cloud BPO	34	37	54
Total BPO	144	152	192
Cloud as % of total	*23.4%*	*24.3%*	*27.9%*

Source: Gartner, UBS estimates

Outsourcing models to change; investment and capability focus likely

Outsourcing models are likely to evolve very differently from the classic time and material or fixed price contracting that is predominant in legacy applications at present. The likelihood that ownership of IT investments, assets and infrastructure will be increasingly transferred to vendors is high, in our view. Some vendors might chose to remain asset-light and act as integrators of digital service offerings while others may be more comfortable with a relatively asset-heavy business model. These models could introduce greater non-linearity (headcount delinking) in outsourcing, which should be margin-accretive for vendors once the investment period is over.

However, from an IT user's perspective, we expect the preference is to move towards outcome-based or pay-per-use pricing models that are less capital-intensive, and transfer the onus of investment and execution risk to vendors. Platform and solution capabilities are likely to have an even greater bearing on vendor selection for digital services, while cost competitiveness should become more important for legacy services, leading to faster commoditisation of these offerings.

Figure 3: Key terms and comparison with current business models

Segment	Digital business model	Current business model
BPaaS - Business Process as a Service	* Outsourced business processes sourced from the Cloud with multi-tenancy options * Ownership of the process is with vendors * Pricing is based on outcome/consumption/subscription models	* A mix of insourced and outsourced teams delivered with ownership bias towards the clients * Pricing based on headcount/units/outcomes
SaaS - Software as a Service	* Turnkey software application offered as a service *Users do not own any software * Accessed by clients via a web-based interface	* Software is owned by users * Services vendors help implement and customise the software * Users are responsible for upgrades and maintenance
IaaS - Infrastructure as a Service	* Computing resources such as servers, storage, networks are owned and hosted by the vendor * Users can self-provision the compute infrastructure using a web-based interface, more flexibility in accessing compute power * Usage/consumption based pricing	* Computing assets are owned by users or dedicated assets are owned by vendors on long term contracts * Fixed compute power as per contract terms * Pricing is based on units/output/throughput
PaaS - Platform as a Service	* Middleware (development platforms, database, messaging systems etc.) sourced from the Cloud * Subscription-based pricing * Multi-tenancy options are possible	* Ownership is with users * Pricing models similar to application development and maintenance

Source: Gartner, UBS

On-demand/pay-per-use to have a deflationary revenue impact

On-demand and pay-per-use models are likely to bring down cost of ownership for IT users, help eliminate excess capacity and increase efficiency for enterprise IT. Digital services tools also lend themselves well to office automation, which could bring down absolute spending on IT support services. We view such trends as being inherently deflationary for IT services vendors. This, along with faster commoditisation of legacy technologies, could have a negative impact on revenue momentum in the medium term.

Most large vendors have 70-80% exposure to legacy IT outsourcing and systems integration at present, which could be at risk from digital services. Most vendors, especially offshore, do not see this as a threat in the next few years, but technology shifts usually have a disruptive effect on legacy services. By extension, vendors with large legacy exposures typically experience an impact on revenue momentum as technology changes occur.

Vendor ranking: Accenture at the top, offshore vendors lagging

We have ranked IT service vendors on the basis of their capabilities (platforms, Intellectual Property, solutions) and revenue exposure to digital services. Revenue exposures take into account the legacy revenue potentially at risk due to technology disruption. Accenture ranks the highest with US$5bn in revenue and over 17% revenue exposure to digital services.

On average, global vendors like Accenture, IBM and Capgemini rank higher than offshore vendors due to better digital capabilities and higher revenue exposure. Eastern European vendors also rank well, despite their smaller scale of operations, due to higher revenue exposure to digital as well as greater agility and flexibility in their business models. This is likely to allow them to move more aggressively into digital services.

Figure 4: Ranking services vendors on digital capabilities and revenue exposure

Company	Capabilities						Revenue Exposure (US$ m)	Digital Services as % of revenue	Rank* (5 star - highest)
	Social	Mobility	Analytics /Big Data	Cloud	AI	Robotics			
Accenture	✓	✓	✓	✓	✓	✓	5,000	17%	★★★★★
ATOS	✓	✓	✓	✓			860	8%	★★
Capgemini		✓	✓	✓			1,650	12%	★★★★
Cognizant	✓	✓	✓	✓			>500	6%	★★★
HCL Tech	✓	✓		✓			<350	7%	★★
IBM^	✓	✓	✓	✓	✓	✓	7,400	13%	★★★½
Infosys		✓	✓	✓	✓		<500	<6%	★★
TCS	✓	✓	✓	✓	✓	✓	700-850	5% - 7%	★★★
Wipro		✓	✓	✓			<300	5%	★
Tech Mahindra	✓	✓		✓			<200	5%	★
Upcoming vendors - Eastern Europe**									
EPAM		✓	✓	✓	✓		<175	~30%	★★★★
Luxoft	✓	✓	✓	✓	✓		<175	~40%	★★★★

* Rank based on capabilities and revenue exposure. ** Ranked higher due to low legacy exposure and potential agility due to lower base.
^ Global IT services only.
Source: Company data, UBS estimates

Offshore vendors have lower digital exposure and higher legacy presence

Offshore vendors rank lower in digital capabilities and exposure compared to their global peers at present. This could put their revenue momentum at more risk when viewed in conjunction with higher exposure at 80-90% to traditional systems integration (SI) and IT Outsourcing (ITO). A higher exposure to pure consulting brings down revenue risk for the likes of Accenture and IBM, in our view. We expect offshore vendors to be affected more by any sluggishness in demand, given their greater sensitivity to discretionary spending, the key reason for our cautious view on India-listed vendors at present.

Figure 5: Revenue exposure: legacy IT outsourcing and Systems Integration could be more at risk (2013)

(US$ m)	IBM	Accenture	Capgemini	Atos	TCS	Cognizant	Infosys	Wipro	HCL Tech	Tech Mahindra	EPAM	Luxoft	Market (% YoY)
Hardware support	7,540	0	0	0	0	0	0	69	86	5	8	0	86,736 (-3.1%)
Consulting	3,902	3,504	1,366	814	608	859	801	175	518	79	46	9	119,840 (+5.0%)
IT Outsourcing (ITO)	28,635	9,581	4,756	5,371	6,821	3,870	2,235	2,657	1,991	1,718	65	368	344,429 (+0.4%)
Systems Integration (SI)	14,030	10,573	6,499	3,286	3,234	3,670	3,901	2,715	1,669	602	437	0	236,600 (-2.6%)
BPO	2,662	3,357	781	1,968	1,544	90	429	413	249	223	0	0	145,879 (+1.4%)
Total	56,768	27,014	13,402	11,439	12,207	8,849	7,365	6,029	4,427	2,626	555	378	931,653 (+0.0%)
ITO & SI as% of total	75.2%	74.6%	84.0%	75.7%	82.4%	85.2%	83.3%	89.1%	82.7%	88.3%	90.5%	97.4%	

Note: ITO includes traditional application development and maintenance.
Source: Gartner

Material changes to ratings and price targets

We downgrade Wipro from Buy to Sell and cut our price target from Rs660 to Rs520, as we think the company is unlikely to meet our expectation of reaching double-digit revenue growth in FY16 due to slower revenue growth at its large clients. Lower digital exposure and slower capability building could also affect the speed of the company's turnaround. Operating margins also continue to perform below expectations, which prompts us to cut our EPS forecasts 2%/4% in FY16/17. We also lower our FY16 target PE multiple from 17.5x to 14.0x, as we expect slower revenue and single-digit earnings momentum will prevent the re-rating we had expected. This values Wipro more on par with Infosys where we forecast similarly weak earnings growth.

We maintain our Neutral rating on Tech Mahindra and raise our price target from Rs2,400 to Rs2,830, despite its lower ranking in digital, as we forecast revenue growth to outpace larger offshore vendors. Operating margins for the company have also started to improve, which should help sustain earnings growth and valuations in a slowing demand environment. We raise our EPS estimates 3%/4% in FY16/17 to reflect faster revenue growth, and raise our FY16 target PE multiple from 14.5x to 16.5x to reflect the company's mid-to-high-teens revenue and earnings growth potential.

Figure 6: Ratings, price target and EPS changes

Company	Rating		Price target (Rs)		FY15E EPS (Rs)		FY16E EPS (Rs)		FY17E EPS (Rs)	
	New	Old	New	Old	New	Old	New	Old	New	Old
Wipro	Sell	Buy	520.0	660.0	34.13	34.35	36.95	37.80	39.19	40.91
Tech Mahindra	Neutral	Neutral	2,830.0	2,400.0	129.69	129.98	171.23	165.80	191.40	183.82

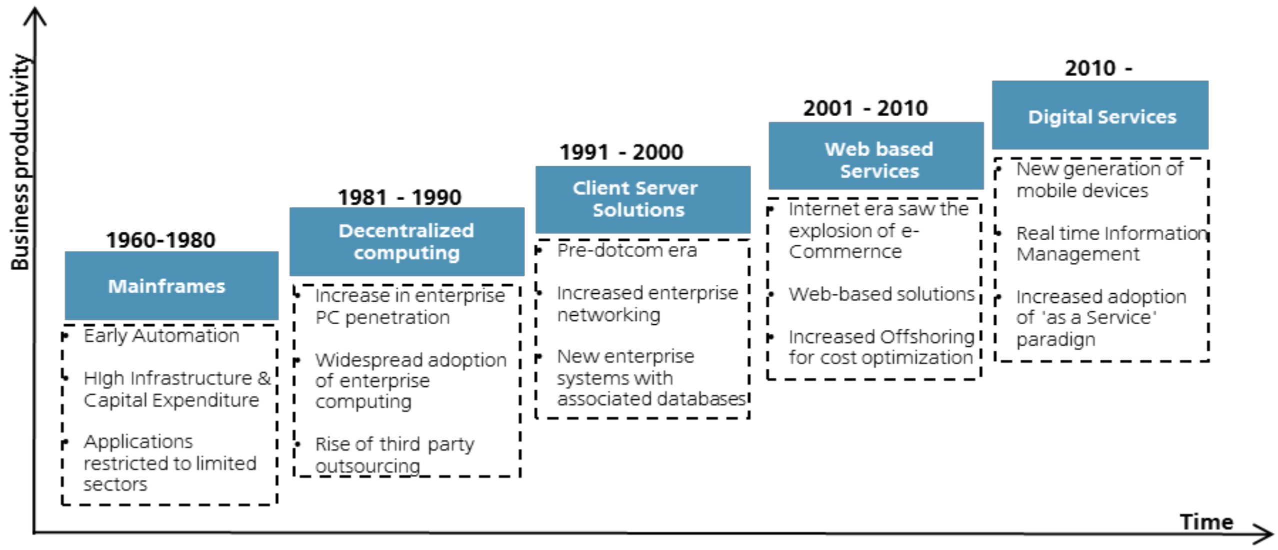
Note: Wipro: adjusted EPS; Mahindra: diluted EPS. Source: UBS estimates

What are Digital Services?

Digital services are the key focus for IT services vendors today with increased investments by vendors in building capabilities in this area. The term digital services or SMAC refers to a computing paradigm that is essentially a confluence of four different technology forces, namely a) Social Media, b) Mobility, c) Analytics and d) Cloud. With Accenture recently reporting annual revenue of US$5 bn from its digital services arm, we think the technology adoption of digital solutions has come of age, and usage is becoming more widespread across enterprise IT users.

Digital Services – definition, impact and key technologies

Figure 7: Timeline - technology shifts in enterprise computing



Source: UBS

Social Media

Definition: Social media is defined as forms of electronic communication such as social networking and microblogging websites (Facebook, Twitter, Wikipedia etc.) through which users create online communities to share information, personal messages, and other content.

Impact: The ever increasing use of social networking platforms has opened up new avenues for customer engagement, marketing and brand building by organisations across the world. Social Media helps firms widen their reach across geographies and demographics; connect with customers and proactively seek real time feedback.

For instance, most technology products have social networking sections on their websites where users exchange their experiences with the products and help each other fix bugs, minor technical issues etc. This helps these firms address customer support at lower costs than complete reliance on in-house support teams.

Key vendors/technologies: Facebook, Twitter, Wikipedia, YouTube, Instagram, Flickr, Reddit.

Mobility

Definition: Mobility, or mobile computing, is the use of portable computing devices such as laptops, tablets, and smartphones on wireline or wireless telecommunication networks, to enables users to access personal or work related applications and data on the move.

Impact: Increased usage of mobile devices like smartphones and tablets and high mobile internet penetration has created the demand for 'anytime/anywhere' data access. Enterprises are being forced to switch to mobility-driven solutions as customers have started engaging more through various mobile applications. Mobility driven enterprise solutions offer the potential to cut cycle times and make organisations more responsive to the needs of their customers.

For example, an enterprise with on-field sales personnel could use mobile computing technologies to provide hand-held devices that access the firm's order management systems for real-time order processing.

Key vendors/ technologies: Citrix Systems, VMware, Wyse, LTE, Wi-Fi, WiMAX, communications technologies such as instant messaging, web conferencing etc.

Analytics (Big Data)

Definition: Analytics, or Big Data analytics as it pertains to digital services, is the process of analysing extremely large unstructured data sets. These data sets typically are from multiple sources that are difficult to process using traditional databases or data processing applications.

Impact: Users on social networking sites and blogs are generating large volumes of data beyond the ability of conventional databases and tools to store or manage them. IBM expects data volumes will grow from 4 zettabytes in 2012 to 35 zettabytes in 2020, a 31% CAGR. Big Data analytics help analyse this massive unstructured information to identify behaviour patterns, trends and thereby provide insights into consumers psyche and preferences. This information can be leveraged to identify new business opportunities and improve decision making.

For example, an ecommerce website could analyse user search and purchase patterns on its website and multiple other social media to offer relevant and customised product offerings to its customers.

Key vendors/ technologies: NoSQL, Hadoop, MongoDB, MapReduce, Hive, PIG, PLATFORA, SkyTree.

Cloud computing

Definition: The term cloud computing refers to the sharing of computing resources on a hosted model over a network. The key distinguishing features of a 'pure cloud' model are a) on-demand computing power, b) hosted delivery of computing, and c) managed services. Cloud computing can be delivered on three models – a) public (open public network), b) private (dedicated to a single organisation) and c) hybrid (a combination of public and private cloud models).

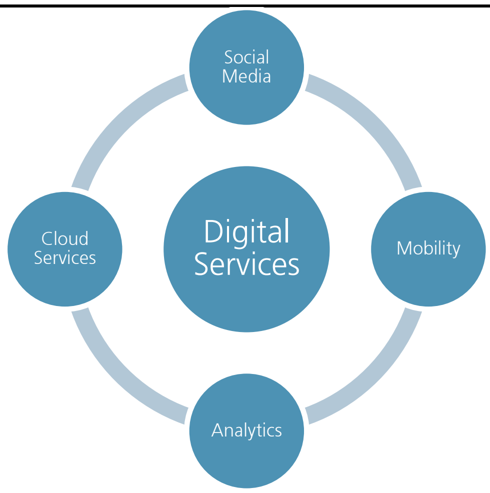
Impact: Cloud computing aims to convert computing power into a near-utility model, putting enormous computing power at much more inexpensive rates in the hands of organisations. Public clouds provide internet based software and hardware services to individuals and organizations that are managed by third parties at a remote location. As shared pool of resources such as data storage spaces, networks and applications are provided on a 'pay per use' basis, cloud services significantly reduce investment costs, provide flexibility and improve scalability.

The use of 'virtual office' applications is one of the key user adoptions in the cloud today. With providers like Google Docs and Microsoft Office Live, businesses can rent office software on an on-demand-basis, instead of purchasing expensive licenses. In addition to reducing the need for in-house computing power (servers, storage etc.), a virtual office solution can also improve accessibility on-the-move and encourage better collaboration.

Key vendors/ technologies: Salesforce.com, Amazon Web Services, Rackspace, Microsoft Azure, Google Docs, etc.

How are digital services different from previous technology shifts?

Figure 8: The confluence of technology forces driving digital services



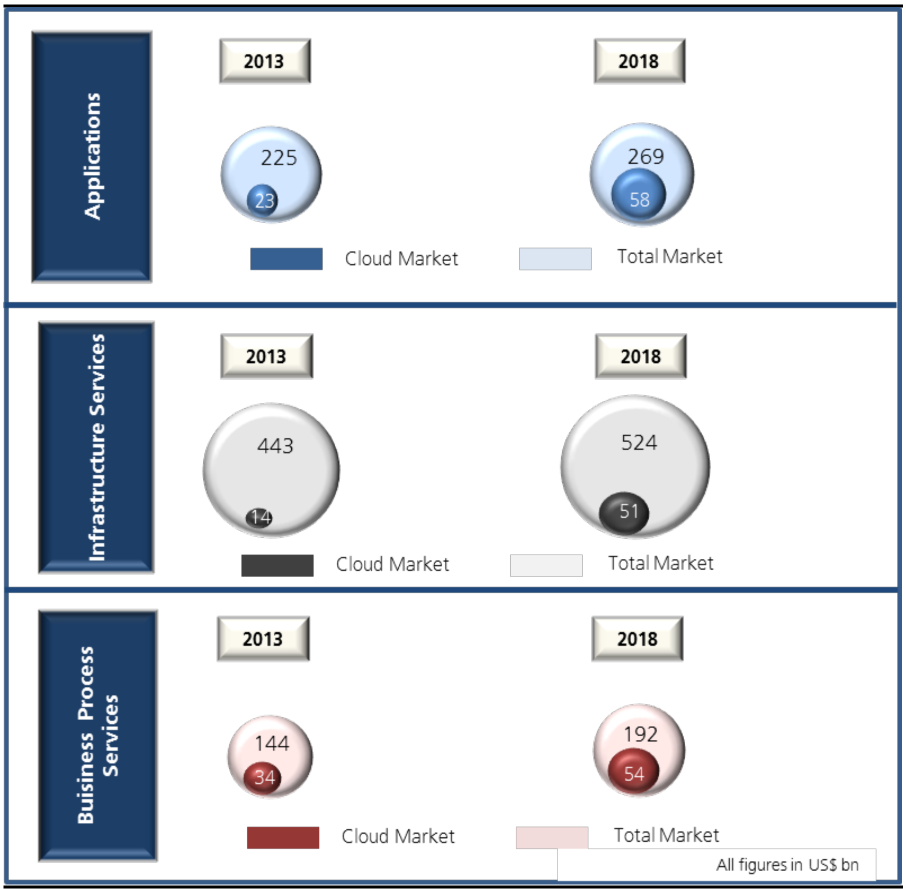
Source: UBS

The digital services shift could be said to be different from previous shifts in computing due to the fact that it is a confluence of multiple technologies rather than a single predominant technology shift (e.g. personal computing, web based applications). Salesforece.com introduced its cloud based services in 1999, followed by Amazon Web Services in 2002, Google Docs in 2006 and Microsoft's Azure in 2009. High performance mobility, however, did not go mainstream till Apple launched its iPhone in 2007, and more importantly, the iPad in April 2010. With increased proliferation of mobile devices, social networking also increased exponentially, bringing in the need for Big Data analytics, which in turn increased the demand for processing power for computing systems, forcing organisations to look at cheaper solutions for large amounts of processing power i.e the cloud. In short, digital services based solutions implement a combination of social, mobile, cloud technologies and Big Data analytics to deliver a cutting edge, customer-focussed computing solutions in a much more cost-effective manner.

Digital Services have already reached critical mass

Applications, BPO are witnessing high adoption rates

Figure 9: Public cloud services penetration – 2013 vs 2018



Source: Gartner, UBS estimates

We expect digital services would eventually replace a significant chunk of the IT services market, with current technologies in systems integration, custom applications and BPO evolving in this direction in the next 5-10 years. However, there are no clear third party estimates of the digital services market at present – IBM estimates the market at US$850bn by 2017. We view the growth in cloud services as a good proxy to adoption rates in digital services. According to Gartner, the public cloud services market touched US$70bn in 2013, excluding cloud advertising.

Cloud adoption is highest at present in the BPO segment with nearly one-fourth of outsourcing already on cloud based delivery models. Applications outsourcing has also reached critical mass, with 10% of outsourcing in 2013 being delivered on the cloud. Infrastructure services on the cloud, at US$14bn in 2013, are still a very small part of the total outsourced market, though adoption rates are expected to accelerate sharply in the next few years.

We believe public cloud adoption is higher in BPO as companies are more comfortable moving shared services (HR, admin etc.) on the cloud as opposed to domain centric business processes. We expect the latter to move to a digital services model with third party vendors offering as-a-service models in this segment. We expect application outsourcing to see a similar model of adoption, possibly with greater involvement of third party software vendors like Salesforce.com in the next few years. Infrastructure services could lend themselves more to a private/hybrid cloud model, especially for large enterprises, due to data security and regulatory concerns.

Adoption likely to accelerate across all service segments

Public cloud based services make up nearly 9% of the total IT services market and are expected to cross 16% of the market by 2018. Growth is likely to be strong in applications and infrastructure services at compounded rates of 21% and 29% respectively in 2013-2018, according to Gartner. While Gartner's growth predictions for cloud adoption in BPO (BPaaS – BPO as a Service) are relatively modest at 10% CAGR in 2013-2018, it would still outpace the traditional BPO outsourcing market, and comprise nearly 28% of total BPO outsourcing.

New roles and business models

We think the role of IT services vendors is likely to change from being mere implementation partners to offering hosted solutions that aggregate multiple digital offerings to deliver seamless business outcomes. Alternatively, they will orchestrate, or broker, multiple third party cloud services on behalf of customers. We expect most services vendors participate in implementation/customisation services in the near term, but we see them increasingly participating in aggregation and integration of digital service offerings in the next few years.

Figure 10: Key roles for services vendors in the digital landscape

Role	Definition
Aggregation	Combining multiple digital offerings into an integrated solution for the user
Integration	Enable integration of multiple digital services with existing system infrastructure
Customisation	Implementing add-on feature and user-specific requirement to pre-built offerings

Source: Gartner, UBS

Figure 11: Key terms and comparison with current business models

Segment	Digital business model	Current business model
BPaaS - Business Process as a Service	* Outsourced business processes sourced from the cloud with multi-tenancy options * Ownership of the process is with vendors * Pricing is based on outcome/consumption/subscription models	* A mix of insourced and outsourced teams delivered with ownership bias towards the clients * Pricing based on headcount/units/outcomes
SaaS - Software as a Service	* Turnkey software application offered as a service *Users do not own any software * Accessed by clients via a web-based interface	* Software is owned by users * Services vendors help implement and customise the software * Users are responsible for upgrades and maintenance
IaaS - Infrastructure as a Service	* Computing resources such as servers, storage, networks are owned and hosted by the vendor * Users can self-provision the compute infrastructure using a web-based interface, more flexibility in accessing compute power * Usage/consumption based pricing	* Computing assets are owned by users or dedicated assets are owned by vendors on long term contracts * Fixed compute power as per contract terms * Pricing is based on units/output/throughput
PaaS - Platform as a Service	* Middleware (development platforms, database, messaging systems etc.) sourced from the cloud * Subscription based pricing * Multi-tenancy options are possible	* Ownership is with users * Pricing models similar to application development and maintenance

Source: Gartner, UBS

Digital outsourcing could transfer investments/assets to vendors

There is potential for outsourcing models in digital services to be quite different from the fixed price or time & material models that are prevalent today. We see the likelihood that ownership of IT assets and infrastructure could be increasingly transferred to vendors, which could make vendor balance sheets more asset-heavy than at present. From a vendor perspective, not all vendors are likely to be comfortable taking on assets and could end up 'orchestrating' multiple cloud suppliers on behalf of their customers, while other vendors could be more comfortable with a more asset-heavy model.

Outcome/Use based pricing models, increased non-linearity

Business outcomes or consumption (pay-per-use) is likely to become an increasingly adopted pricing model, which is also likely to transfer more investments and risk to vendor balance sheets as opposed to existing outsourcing models. From a user point of view, ownership of IT assets is likely to decrease and increased process automation could help reduce running costs. We also see pricing pressure on traditional enterprise solutions deals as these are perceived as 'old technology' investments (because there is less demand and too much supply) and therefore do not command premium pricing any longer.

On the plus side, the new models in digital services are likely to lend themselves greater non linearity by delinking headcount growth from revenue. This could come as a welcome relief for large vendors whose employee bases now number in hundreds of thousands. At steady state, these models could retain healthy profitability metrics and offset the ongoing commoditisation in the legacy businesses.

Digital adoption likely to be deflationary on legacy revenue

While most vendors insist that they do not expect significant revenue deflation of the existing traditional revenue, we worry that increased adoption of pay-per-use and on-demand models will be inherently deflationary on revenue. As our US analyst Steve Milunovich pointed out in his note on IBM, keeping legacy revenue flat 'is a stretch' in any technology disruption. Accenture is already seeing fewer traditional enterprise solutions projects and many other vendors agree that their clients are less willing to sign large enterprise deals at present.

Vendor responses and investments

Nearly all vendors have articulated strategic intent to target the digital opportunity, though revenue contribution from this segment continues to be small for many vendors. While there are no standardised definitions for digital services activity, among the pure services vendors, Accenture leads with US$5bn in revenue from digital services, followed by Capgemini at US$1.65bn. We estimate that IBM has a services exposure of nearly US$7.4bn in this segment. Indian vendors have relatively smaller exposures at present.

US-listed vendors

IBM (Neutral, US$165)

IBM is a significant player in SMAC technologies, which are a major part of its "strategic imperatives" business lines that offer growth to offset sluggishness in legacy businesses. According to IBM:

- Mobility is a $103bn opportunity in 2017 growing 18% annually
- Social is an $89bn market in 2017 growing 9%
- Cloud is a $392bn market in 2017 growing 25%
- Big Data and Analytics is a $266bn market in 2017 growing 6%

In terms of its own revenue, Big Data and cloud are the largest contributors:

- Big Data revenue was $16bn in 2013 and has grown by 8% so far this year. That is larger than many market estimates. IBM appears to be including DB2 and other streams that others might not consider analytics. Still, IBM is a leader with Watson and an Analytics Solutions Lab in Ohio near consumer goods clients.
- Cloud was $4.4bn last year and is up over 50% this year; the acquisition of SoftLayer has been critical in IaaS.
- Social is about $1bn and an evolution of the Lotus Notes business.
- Mobile likely is less than $500mn led by IBM's MobileFirst offering.

IBM's collaboration with Apple should result in more than 100 new "made-for-business apps" across a number of verticals optimizing IBM cloud services for iOS, including device management, security, Big Data analytics, and mobile device integration via IBM's Fiberlink MDM acquisition. IBM plans to utilize more than 100,000 of its industry and domain consultants and developers as well as offer device supply, activation and management services for iPhone and iPad, with leasing options.

Accenture (Neutral, US$83)

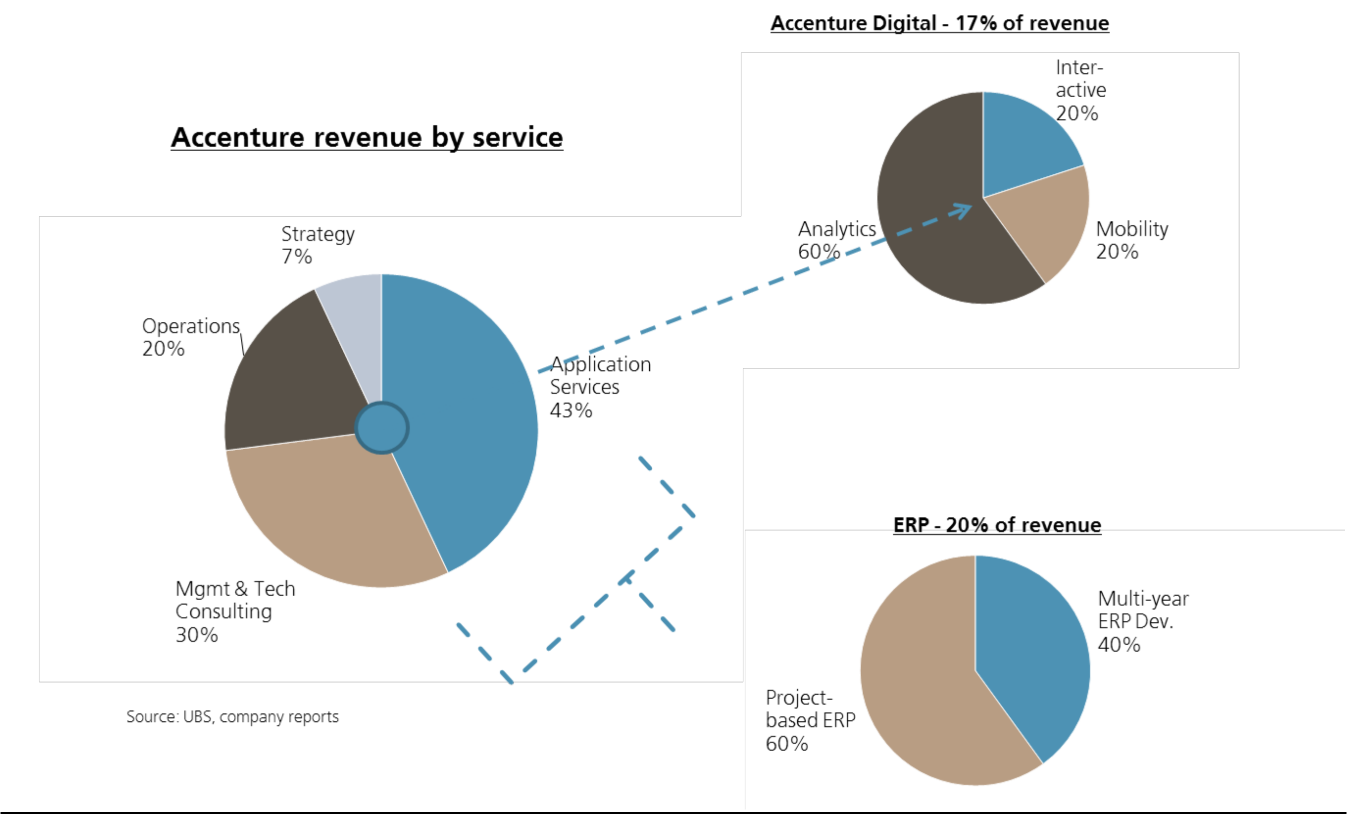
Accenture Digital includes Accenture Interactive ($1bn), Analytics ($3bn), and Mobility (>$1bn). Accenture Digital makes up 17% of revenue with more than 28,000 employees and touches all four of the company's dimensions (Application Services, Strategy, Operations, and Management & Technology Consulting). Accenture Digital currently serves the top 10 pharmaceuticals, 7 of the top 10 consumer products companies, and 7 of the largest 10 global retailers. Accenture's 2014 Technology Vision document highlights six big trends: (1) the digital-physical blur; (2) from workforce to crowd-source; (3) data supply chain; (4) harnessing hyper-scale; (5) the business of applications; and (6) architecting resilience.

Currently the Accenture Labs have five R&D areas of focus:

- Data insights – business outcomes from your data
- Digital experiences – reimagine customer and employee relationships
- Infrastructure and systems – innovations to create highly dynamic, connected IT
- Security – threat intelligence, security analysis, active defense
- Software engineering – boosting productivity through innovation

In addition, the Labs have three Strategic Innovation Initiatives: (1) the Industrial Internet, (2) the digital customer, and (3) the digital workforce.

Figure 12: Accenture digital revenue exposure



Source: Company data, UBS

Cognizant (Buy, US$57)

Earlier this year, Cognizant said it exceeded its SMAC revenue target of $500mn in 2013, representing more than 6% of total revenue. Management has noted that client demand for SMAC-related deals has shifted from pilot projects to more transformative projects, estimating that 30-40% of SMAC revenue comes from "business-as-usual" upgrading and maintenance engagements as opposed to discretionary budgets. In 2012, the company noted that 60% of its top 100 customers were doing some SMAC-related work. Currently our sense is that the number of SMAC clients has grown considerably with 150 clients engaging in SMAC related deals.

In order to take advantage of the new SMAC opportunities, Cognizant decided to set up Emerging Business Accelerators to focus on Horizon 3 away from the mainstream Horizon 1 and 2 units. This year, the company has been focusing its capabilities as it relates to sensor technology, machine learning, Internet of things, and 3D Printing. Regarding cloud computing, Cognizant has three hosting centres to support customer solutions but not with the intention of becoming an Amazon Web Services. Two targeted markets are BPO-as-a-Service (BPaaS) and IT infrastructure. *Cloud360* is an end-to-end cloud management solution that provides enterprises clear visibility and complete control of their IT infrastructure.

Europe-listed vendors

Capgemini (Buy, €61.5)

In 2013, 12% of Capgemini's revenues, or €1,200m, were from its SMAC portfolio of products, which grew +25% over the year. At the Analyst Day in May 2014, Capgemini announced that its objective was to increase its SMAC portfolio weighting to 20% of revenues, growing at 20% per annum. At the same time, management acknowledged that the eroding legacy business will have a 7.5-11.5% negative impact on revenue over a 5-year period (i.e. 1.5-2.3% per annum). Within this, management estimates that 5% of revenues are at risk from IaaS (30-50% of these revenues at risk over a 5-year period) and 30% from SaaS solutions (20-30% of these revenues at risk). The manner in which the total cost of ownership (TCO) of SaaS plays out over the next few years will determine the extent of the impact on Capgemini's legacy business, we believe, although management sees net gains from new cloud-related activity and market share gains on the back of increased offshoring appetite in Europe.

ATOS (Buy, €67.5)

Atos expects similar trends to play out. At its Investor Day in November 2013, management guided for sales in its Canopy cloud division to more than double from €280m in 2013 to c€700m by 2016. Net growth from the Managed Services division would be c1% to 2016, however, as a proportion of the legacy business becomes cannibalised. However, management also guided that a shift in the business mix towards digital, cloud, and big data services would bring about a 50bp pa margin improvement, helping to expand its operating margin from 7.5% in 2013 to 8.5-9.5% in 2016.

Upcoming vendors – Eastern Europe

Eastern European outsourcers EPAM and Luxoft see digital transformation as more complicated than traditional IT services workflows, requiring agile capabilities across the software stack. We tend to agree, seeing the Agile approach helping to get projects off the ground faster, providing business results sooner, and meeting requirements to keep-up in a dynamic technology innovation cycle.

We see both EPAM and Luxoft as pure plays on the high-end of the IT Services value stack. Both have developed leading competencies in Open Source, Big Data, Content, Cloud, User Experience, and Business Intelligence, and continue to leverage these capabilities in their respective delivery platforms. More importantly, both have embraced agile software development as their underlying core competency. Both companies are uniquely positioned to capture the strong pool of application development talent from Eastern Europe. The region graduates almost one million STEM students annually. Both EPAM and Luxoft provide a vast array of digital/SMAC services.

EPAM (Buy, US$54)

EPAM has been promoting the theme that "software enriches the brand." Along their acquisition of Empathy Lab in 2012, the company has been growing its omni-channel marketing efforts where it helps eCommerce clients produce a customer experience that is consistent and appropriate across every touch point in every location.

Luxoft (Buy, US$44)

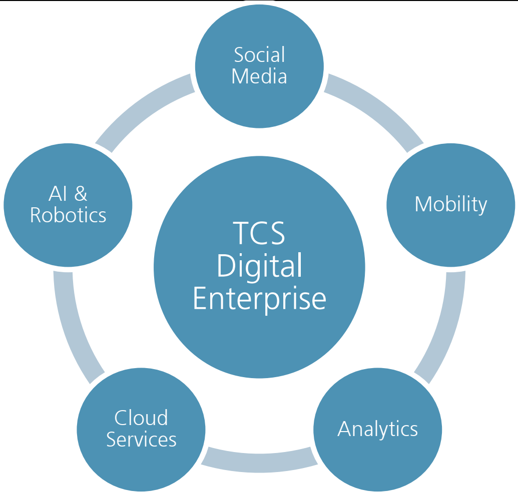
Luxoft's primary exposures are focused in financial services and automotive. In financial services, the company is heavily engaged in creating reference data solutions that are required to power big data and big data analytics. Also in financial services, Luxoft provides several mobile solutions along with its HTML5, Horizon platform (a visualization framework) that allows flexible mining of complex data sets. In automotive, Luxoft's solutions in the connected car touch nearly every element of the SMAC stack and the underlying theme of the Internet of Things.

India-listed vendors

TCS (Neutral, Rs2,700)

TCS has been investing in digital services initiatives in the past few years and launched its Digital Software & Solutions Group in January 2014 as separate business unit to target digital transformation initiatives by its clients. We estimate current digital revenue at US$700-800mn at present. The company is initially targeting Retail, Communications and Banking & Financial Services customers as part of its *Digital Reimagination*™ strategy. The company expects cumulative revenue from digital services to exceed US$5bn in the next three-to-four years, with the segment expected to touch annual revenue of 'a few billion dollars' by the end of that period.

Figure 13: TCS Digital Five Forces Strategy



Note: AI denotes Artificial Intelligence.
Source: TCS

TCS has the largest number of platforms/solutions in digital services amongst the Indian services vendors. The key branded offerings include:

- *TCS Mobile Point of Sale*™ (point of sales process)
- *TCS iAgent*™ (Insurance customer management and adviser services)
- *TCS Event Maestro*™ (event information with rich multimedia experience)
- *TCS Colleague Finder*™ (advanced directory-search tool)
- *TCS Field Service Mobile*™ (mobile solution for field service automation)
- *TCS Smart Sales Mobile*™ (improves the efficiency of the sales cycle)
- *TCS Mobile Docs*™ (enterprise documents on the go)
- *TCS dreamUP*™ (data on the go with dashboards, scorecards and infographics)
- *TCS Communicator*™ (secure, simple enterprise email and scheduling on the go)
- *TCS NewsRack*™ (manage corporate newsletters on the go)
- *TCS Hy5 Canvas*™ (mobile application development platform)
- *TCS Hy5 Test*™ (mobile testing automation)
- *TCS Hy5 Presidio*™ (mobile device and application management)
- *TCS Active Archive* (archived data always available for analytics)
- *TCS BigData Desktop* (Hadoop access made easy)
- *TCS Data Migration Tool* (seamless data migration to Hadoop)
- *TCS PeriVista* (customer centricity in a digital age)
- *TCS PeriVista Shopper* (for retail industry)

- *TCS Sensor Data Analytics Framework* (analytics on sensor/ log data)
- *Employee Social Referral Solution*
- *Supplier Social Network*
- *Social CRM Solutions Suite*
- *TCS Social Listening Platform*
- *Social Campaign Management Platform*
- *Cloud Mpower* (business & IT portfolio analysis)

Infosys (Sell, Rs2,950)

Infosys recently consolidated its digital platform initiatives in a new subsidiary called '*Edge Verve*'. The *EdgeVerve* product suite consists of six different products at present,

- *AssistEdge* (customer service)
- *BrandEdge* (digital marketing)
- *CreditFinanceEdge* (credit servicing)
- *InteractEdge* (customer content management)
- *TradeEdge* (global sales platform)
- *ProcureEdge* (Soure-to-Pay life cycle)

In addition to the above, Infosys also has other cloud and mobility initiatives:

- *Cloud Ecosystem Hub* (hybrid cloud gateway)
- *One Click Private Cloud Deployer* solution
- *mConnect* (enterprise mobility middleware)
- *Infosys mFA* (field force automation)
- *Mobile Wallet*
- *Infosys TruSync* (smart client data synchronisation middleware)
- *Infosys mDuster* (mobile application testing platform)

While the company has not articulated a specific revenue target for this segment, we expect the company would hope to scale this unit up to a multi-billion dollar revenue exposure in the next few years. With over US$4.6bn in cash, Infosys has ample scope to accelerate capability building and revenue growth in this segment through M&A.

HCL Technologies (Neutral, Rs1,750)

Digital services are a key focus for HCL Tech as articulated in its three-point strategy for future revenue growth in the 1Q FY15 earnings call. The company's digital services as encapsulated under its Gen 2.0 Outsourcing offerings include

– *EFaaS* (Enterprise Finance as a Service)

– *DSI* (Digital Systems Integration)

– Cloud Computing Services

– Social Intelligence

Wipro (Sell, Rs520)

Wipro has also noted seeing increased traction for its digital offerings, though the company is yet to articulate an integrated strategy in this direction. Cloud and Mobility are the key offerings under digital services for Wipro at present, and the company has been ramping up presence in the analytics segments as well. Key offerings:

– *Finance & Accounting BPaaS*

– *ServiceNXT™ Cloud Operations Center* (cloud integration platform)

– *ERP as a Utility (EaaU)*

– *ClickLoyalty* (Cloud based customer management)

Tech Mahindra (Neutral, Rs2,830)

Tech Mahindra's digital solutions are encapsulated under what the company calls its *NMACS* (Networks, Mobility, Analytics, Cloud and Security) strategy. The company hopes to leverage its extensive working experience with large telcos like BT and AT&T in to a networks & mobility led services offering in digital services. Revenue exposure is small at present, but the company hopes to invest more aggressively in this segment in the next few years. Key offerings:

– *Billing as a Service (BaaS)*

– *mEMS* (Modular Enterprise Managed Services delivered on cloud)

– *Socio* (social media management solution)

– *Tecnico* (tech support platform for user device connectivity)

Recent M&A – global examples

Most vendors have started channelling an increased proportion of investments into digital services initiatives - most such investments have been acquisitions of intellectual property. Typically, large incumbent services vendors are not technology innovators. Such vendors usually acquire capabilities in new technology segments through the inorganic route. The digital services wave has placed greater emphasis on intellectual property, and sparked off a spate of acquisitions by large IT services vendors. IBM and Accenture have been the most active in this regard, making multiple acquisitions in the last few years to strengthen capabilities in this segment in the last few years.

Figure 14: M&A in digital services

Company	Year	Target	Size (US$ m)	Capabilities
Accenture	2014	i4C Analytics	NA	Advanced Analytics
Accenture	2014	ClientHouse	NA	Cloud Solutions - Salesforce
Accenture	2013	Mortgage Cadence's	NA	Software-as-a-Service (SaaS) and Cloud-based solutions
Accenture	2013	ASM Research	NA	Data analytics, Cloud, Data warehousing,
Accenture	2013	Acquity Group	316	Digital marketing and technical services
Accenture	2013	Fjord	NA	Mobility capabilities
Accenture	2013	ChangeTrack Research	NA	Predictive Analytics
Accenture	2013	Procurian	NA	Procurement BPO
Atos	2012	blueKIWI	26	Enterprise Social Networking
Atos	2011	eUtile	N/A	Smart energy solutions
Atos	2010	Venture Infotek	87	Indian acquiring and processing provider
Capgemini	2011	Prosadie	552	Internet and Telecom Services
Capgemini	2010	IBX Group	84	Cloud-based procurement services
Capgemini	2011	Prosodie	552	Internet and Telecom Services
Capgemini	2010	IBX Group	84	Cloud-based procurement services
Cognizant	2014	Cadient	30	Digital Marketing
Cognizant	2014	Trizetto	2,700	Healthcare IT Solutions
EPAM	2014	Netsoft USA	NA	Healthcare Analytics
EPAM	2012	Thoughtcorp	NA	Enterprise Mobility and Business Intelligence
EPAM	2012	Empathy Lab	NA	Digital Solutions
HCL	2008	Liberata Financial Services	2	Insurance claims processing platform
IBM	2014	Lighthouse Security Group	NA	Cloud Security Services
IBM	2014	CrossIdeas	NA	Cloud Security Services
IBM	2014	Cloudant, Inc.	NA	Database-as-a-Service
IBM	2013	The Now Factory	NA	Mobile Networks & Big Data Analytics
IBM	2013	SoftLayer Technologies	2,000	Cloud Computing Infrastructure
IBM	2013	Fiberlink	330	Mobile Device Management
IBM	2012	StoredIQ	NA	Big Data Analytics
IBM	2012	Kenexa	1,300	Advanced social business and analytics capabilities
IBM	2011	DemandTech	440	Cloud-based Retail Analytics
IBM	2010	Netezza	1,700	Data warehousing and analytics
Infosys	2009	McCamish	38	Insurance claims processing platform
Luxoft	2014	Radius Inc	NA	Mobile and Cloud enterprise solutions
Luxoft	2014	Mecel Populus Suite	NA	Automotive HMI Design and Development
TCS	2012	CRL (Computational Research Laboratories)	34	High performance applications and cloud offerings
TCS	2008	Citigroup Global Services Limited	505	Banking & Financial Services process management platforms
Tech Mahindra	2013	Comviva	55	Mobility
Tech Mahindra	2012	vCustomer	27	Customer interaction management platform
Wipro	2013	Opus CMC	75	Mortgage Solutions and Outsourcing
Wipro	2013	Opera Solutions	30	Big Data Analytics
Wipro	2012	Promax Applications Group (PAG)	35	Analytics

Source: Company data

Figure 15: Key vendors and capabilities in digital services

	Accenture	ATOS	Capgemini
Services	• Accenture Analytics • Accenture Business Services • Social, Cloud and Accenture Mobility	• Big Data • Business Process Solutions • Canopy Cloud • Smart Mobility: Mobile Solutions	• Big Data & Analytics • Cloud Services • Mobile Soultions • Business Process Services
Solutions	• Cloud Strategy Solution • Enterrprise Mobility Business Solutions • Accenture Interactive • Industry specific BPaaS	• Big Data Analytics • Multichannel management & Mobility • Contact Center BPO • Atos Context Broker Platform - Mobile Services	• SkySight: Cloud Orchestration Services • Capgemini Mobile Secure with AirWatch • IBX Procurement Cloud
Partners	• CA, VMware for Cloud Management • Salesforce for PaaS • Tibco for IaaS • NetSuite for cloud-based software	• EMC, VMware - coinvested cloud alliance called Canopy • blueKiwi - SaaS with the option of Private Cloud configuration • Samsung for mobile solutions	• Salesforce.com, Microsoft Azure for PaaS • Amazon Web Services for IaaS • VMware, Cloudera, SAP and Oracle for Cloud Applications

	Cognizant	EPAM	HCL Technologies
Services	• Analytics • Business Process Services • Social, Cloud & Mobility Services • Digital Business Services	• Cloud/ SaaS • Mobile • Digital Strategy	• Digital Services Integration • EFaaS & Cloud Computing Services • Social Intelligence & Mobility Services
Solutions	• Cognizant BusinessCloud Solutions Portfolio consisting of TruMobi Enterprise Mobility Suite, Cloud360, CareSERV	• Mobile Orchestrator • RESTful API - Cloud Orchestrator • CLI (Command Line Interface)	• Migration++ • MyCloud, EoF, Agora: Cloud Monetization & Service delivery platform • MTaaS: Service Management Platform
Partners	• Amazon Web Services for IaaS • Salesforce.com for PaaS • CallidusCloud for Software	• Amazon Web Services for IaaS • Microsoft Azure, Salesforce.com PaaS for SaaS • Adam for Mobile platforms	• Amazon Web Services for Iaas • Salesforce.com , Microsoft Azure, Tibco for Paas • BMC, CA for Cloud Management

	IBM	Infosys	Luxoft
Services	• Cloud Computing • Mobility • Business Analytics • Business Process Services	• Cloud & Big Data Services • Enterprise Mobility • Business Process Services	• Big Data • Cloud Services • Mobility • Reference data solutions - BPaaS
Solutions	• Cloud & Smarter Infrastructure solutions: Tivoli, Netcool, TRIRIGA Endpoint Manager, SmartCloud service management	• The Infosys Cloud Ecosystem Hub & The Infosys Big Data Hub • Edgeverve, a subsidary of Infosys (BPaaS): AssistEdge, BrandEdge, ProcureEdge	• SuperCloud - Cloud orchestration DMFusion - Big data analytics platform • iStockTrack - finance visualization platform
Partners	• Microsoft Azure, Salesforce.com, Tibco for PaaS • Citrix for IaaS • Actifio for SaaS	• Amazon Web Services, VMware for IaaS • Salesforce.com for PaaS • CA, HP, IBM for Cloud Management	• Microsoft Azure for PaaS • Amazon Web Services for for IaaS • Teradata for Big data analytics • Tibco & Progress software for Cloud services

	TCS	Tech Mahindra	Wipro
Services	• Digital Enterprise: Mobility and Pervasive Computing, Cloud, Big Data, AI & Robotics and Social Media • Business Process Services	• Cloud Services • Mobility Solutions • Business Services Group	• Analytics & Information Management • Mobility • Cloud Services • Business Process Services
Solutions	• Platform BPO Solutions (PaaS), Transformation Solutions (IaaS) & iON • Diligenta & e-Serve, subsidiaries of TCS (BPaaS)	• Cloud Advisory, Enablement Services, Cloud Competency Centre • Platforms: Billing as a Service, mEMS, Capio, Socio, Tecnico	• mAXELERATE Mobile Solutions • Base))) - Analytics business process platform • ServiceNXT, VirtualDesk and Finance & Accounting BPaaS
Partners	• BMC, CA for Cloud Management • Salesforce.com for PaaS • Digi International for Device Cloud	• Salesforce.com • CA, IBM & Oracle • Cloudera	• Amazon Web Services, VMware for IaaS • Salesforce.com and Google for PaaS • Workday and NetSuite for ERP, HCM processes

Source: Company data, UBS

Vendor positioning and preferences

Accenture, Capgemini rank well, offshore vendors lag behind

Global vendors score well on UBS Digital Services Ranking

We have ranked IT services vendors on the basis of their capabilities (platforms, Intellectual Property, solutions) and revenue exposure to digital services. The revenue exposures also take into account the legacy revenue that is potentially at risk due to technology disruption as we believe that the move to digital will be deflationary on legacy revenue. Companies with better developed proprietary digital solutions and higher revenue exposure score better on our 5-point ranking scale (1-lowest, 5- highest). All ranks are relative to each other and do not extend outside the scope of the vendors discussed in this report. For instance, a rank of 5 for Accenture does not put it on par with Amazon Web Services or Salesforce.com on digital services capabilities.

Figure 16: Ranking services vendors on digital capabilities and revenue exposure

Company	Capabilities						Revenue Exposure (US$ m)	Digital Services as % of revenue	Rank* (5 star - highest)
	Social	Mobility	Analytics /Big Data	Cloud	AI	Robotics			
Accenture	✓	✓	✓	✓	✓	✓	5,000	17%	★★★★★
ATOS	✓	✓	✓	✓			860	8%	★★
Capgemini		✓	✓	✓			1,650	12%	★★★★
Cognizant	✓	✓	✓	✓			>500	6%	★★★
HCL Tech	✓	✓		✓			<350	7%	★★
IBM^	✓	✓	✓	✓	✓	✓	7,400	13%	★★★★½
Infosys		✓	✓	✓	✓		<500	<6%	★★
TCS	✓	✓	✓	✓	✓	✓	700-850	5% - 7%	★★★
Wipro		✓	✓	✓			<300	5%	★
Tech Mahindra	✓	✓		✓			<200	5%	★
Upcoming vendors - Eastern Europe**									
EPAM		✓	✓	✓	✓		<175	~30%	★★★★
Luxoft	✓	✓	✓	✓	✓		<175	~40%	★★★★

Note: *Ranks based on capabilities and revenue exposure. **Ranked higher due to low legacy exposure and potential agility due to lower base.
^ Global IT Services only.
Source: Company data, UBS estimates

Accenture is the best placed in terms of capabilities in digital services, aided in part by more aggressive acquisitions in this segment. At 17% of revenue, it is also the most exposed to digital services as % of revenue. A higher composition of consulting, which we think will be relatively immune, also adds to the ranking for Accenture. **We rate Accenture at 5 stars**, the highest in our ranking scale. While we feel ERP cannibalisation fears due to cloud have diminished recently, we maintain a Neutral rating on the stock as we think stock upsides are limited as valuations are rich at forward PE of 16x.

Capgemini rates 4 stars at the second highest digital revenue exposure among the pure services vendors. We maintain a Buy rating on the stock as we think the company is close to its 10% margin target (2015), which has enabled the management to turn focus to revenue growth. A fading drag from the company's offshore shift in the past few years is also likely to help accelerate revenue growth. At its analyst meet in May, the management foresaw 5-7% revenue growth in the next 3-4 years even without macro improvement.

We rank IBM at 3.5 stars for its exposure to digital services. While IBM outstrips all other vendors in sheer revenue size in this space, the greater reliance on legacy revenue and the resultant erosion likely in revenue momentum (some of which is already visible) warrants a lower rank than Accenture. We maintain a Neutral rating on the stock as we think the transition to new technologies could take another three years.

Among the offshore vendors, **TCS and Cognizant rank at 3 stars** as they rate well in terms of capabilities and platforms, but like most other vendors, digital services exposure remains at single digit percentages of overall revenue. We maintain a Neutral rating on TCS as valuations are close to peak cycles multiples (close to 21x FY16 PE multiple) and offer no room for execution errors, as evidenced by the sharp stock sell-off after a softer than expected 2Q FY15 earnings and FY15 outlook recently. We maintain a Buy rating on Cognizant as it remains relatively cheap among offshore services vendors at a PE multiple of 14.3x on 2016 EPS against longer term expected earnings growth rate of mid-high teens.

Infosys and **HCL Tech merit 2.5 stars each**, lower than TCS and Cognizant due to lower number of platforms. IP and solutions though revenue exposure is similar. Infosys is at the early stages of a revenue turnaround, and we maintain a Sell rating on the stock as we think a) market share erosion, b) impact of high employee attrition and c) management churn in the last 2-3 years will delay the expected turnaround beyond current market expectations. We maintain a Neutral rating on HCL Tech due to concerns of slowing revenue momentum and delay in conversion of deals into revenue.

While Atos' joint venture with EMC and VMWare, Canopy, is enjoying good growth at high margins, generating €280m in sales in 2013, there is some cannibalization impact on the traditional infrastructure management business. There are some interesting Big Data and cyber-security capabilities coming with the Bull acquisition, but overall the business has been slower to repoint itself in the direction of SMAC-related activities and **we rank Atos at 2 stars**, although the Worldline business remains another form of differentiation.

Wipro and **Tech Mahindra get ranked lower at 1 star** each due to much smaller revenue and fairly nascent market exposure of their platforms and solutions. We maintain a Neutral rating on Tech Mahindra despite its lower ranking in digital as we see revenue growth to outpace its larger vendors. Operating margins for the company have also started to improve, which should help the company sustain earnings growth and valuations against a slowing demand environment.

EPAM and **Luxoft rate 4 stars** each despite the low scale of operations as we believe the smaller installed legacy base offers greater agility and flexibility for these companies to aggressively move into digital services. These companies also have a greater percentage exposure to digital services at 30-40% of revenue, the highest revenue exposure among the vendors analysed in this report. We maintain Buy ratings on both EPAM and Luxoft as we believe that these companies will continue to gain market share on the strength of their niche technology capabilities.

Company page

Wipro Ltd.

Downgrade to Sell: revenue momentum unlikely to increase to double digits in FY16

Equities

India
Diversified Technology Services

12-month rating	**Sell**
	Prior: Buy
12m price target	**Rs520.00**
	Prior: Rs660.00
Price	**Rs552.70**

RIC: WIPR.BO **BBG:** WPRO IB

Trading data and key metrics

52-wk range	Rs617.85-469.90
Market cap.	Rs1,353bn/US$30.5bn
Shares o/s	2,449m (ORD)
Free float	25%
Avg. daily volume ('000)	1,829
Avg. daily value (m)	Rs1,042.9
Common s/h equity (03/15E)	Rs405bn
P/BV (03/15E)	3.4x
Net debt / EBITDA (03/15E)	NM

EPS (UBS, diluted) (Rs)

	From	To	% ch	Cons.
03/15E	34.35	34.13	-0.64	35.19
03/16E	37.80	36.95	-2.25	39.54
03/17E	40.91	39.19	-4.21	44.60

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Slower demand and lower digital exposure to delay turnaround

We think Wipro is unlikely to meet our earlier forecast of double-digit revenue growth in FY16 due to softer revenue growth at its large clients and slower demand in 2015E versus 2104. In the medium term, lower digital service exposure with no integrated offerings and slower capability building could impact revenue turnaround speed. Operating margins also continue to perform below expectations, and we expect sluggish revenue momentum to be a headwind for margins in the medium term.

New deal ramp ups offset by softer momentum in large clients

We noted significant revenue accrual from new deals in Q2 FY15 with infrastructure services (27% of revenue in Q2 FY15) growing at 7.8% QoQ. Revenue contributions from the top five and top 10 client segments continued to suffer with QoQ declines of 3.7% and 2.0%, respectively, in Q2 FY15. Wipro expects slower revenue growth at its top accounts to continue. With base revenue softening, Wipro's challenge is to keep the deal momentum high enough to sustain revenue growth at current levels of 2-4% QoQ in the next few quarters. As seen with the Atco deal (a US$1.1bn deal signed in July 2014 with an upfront payment of US$195m), a large deal can be expensive with significant upfront costs that are margin-dilutive on a portfolio basis.

Slow earnings growth to prevent PE re-rating versus our earlier expectation

We cut EPS forecasts by 2%/4% for FY16/17, as we expect slower revenue growth. The single-digit earnings momentum that we now forecast is likely to prevent the PE re-rating we had expected. We lower our FY16E target PE multiple from 17.5x to 14.0x, which values Wipro more in line with Infosys where we forecast similar weak earnings growth.

Valuation: downgrade to Sell; cut price target from Rs660.00 to Rs520.00

We cut our price target to Rs520.00, which is based on 14x FY14E PE, on account of softer revenue momentum at large clients and a lower demand outlook leading to a longer revenue turnaround time.

Highlights (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenues	371,971	430,980	437,628	476,720	515,327	558,916	603,676	648,093
EBIT (UBS)	60,735	72,519	89,352	93,569	100,224	105,298	109,176	111,809
Net earnings (UBS)	55,731	66,359	77,966	84,237	91,563	97,512	102,553	106,886
EPS (UBS, diluted) (Rs)	22.69	26.98	31.66	34.13	36.95	39.19	41.05	42.61
DPS (Rs)	6.02	7.02	8.03	9.00	9.00	9.00	9.00	9.00
Net (debt) / cash	60,669	90,193	123,166	173,408	225,603	285,366	350,646	419,894

Profitability/valuation	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
EBIT margin %	16.3	16.8	20.4	19.6	19.4	18.8	18.1	17.3
ROIC (EBIT) %	32.9	34.8	42.9	41.2	41.9	41.8	41.1	40.1
EV/EBITDA (core) x	12.8	10.6	10.2	11.4	10.2	9.2	8.3	7.6
P/E (UBS, diluted) x	17.7	14.4	14.6	16.2	15.0	14.1	13.5	13.0
Equity FCF (UBS) yield %	2.0	6.0	5.0	4.2	4.5	4.6	4.9	4.9
Net dividend yield %	1.5	1.8	1.7	1.6	1.6	1.6	1.6	1.6

Source: Company accounts, Thomson Reuters, UBS estimates. Metrics marked as (UBS) have had analyst adjustments applied. Valuations: based on an average share price that year, (E): based on a share price of Rs552.70 on 07 Nov 2014 18:17 HKT

Investment Thesis

Wipro Ltd.

12-month rating **Sell**

12m price target **Rs520.00**

Investment case

After a few quarters of improved revenue momentum in FY14, Wipro's revenue from its large accounts has started to slow. This is likely to drag down overall revenue momentum even though new deal ramp ups in the past couple of quarters have been strong. In the absence of revenue acceleration at its top clients, Wipro will need to rely more on large deal flows, which could be expensive in terms of upfront costs and margin dilution. We anticipate softening demand in 2015 versus 2014, which is also likely to hamper the company's prospects for a turnaround.

Upside scenario

The key assumptions for our upside scenario are: 1) better-than-expected revenue growth due to market share gains at Wipro's large clients increasing overall dollar revenue to 10-13% in FY16 and beyond. We would expect EBIT margin to be sustained within a narrow band versus our current estimate of a 40-60bp annual fall, and our upside scenario is Rs660.00.

Downside scenario

The key assumptions for our downside scenario are mid-single digit revenue growth in FY16 and mid-to-high-single digit revenue growth in FY17-18. Margins could fall as much as 70-90bp pa in such a case on a constant currency basis. In this scenario, our downside valuation is Rs480.00.

Upcoming catalysts

The earnings announcement in early January 2015 when the company is likely to discuss the IT budget outlook for 2015 in addition to its quarterly guidance for Q4 FY15. We expect a negative budget outlook.

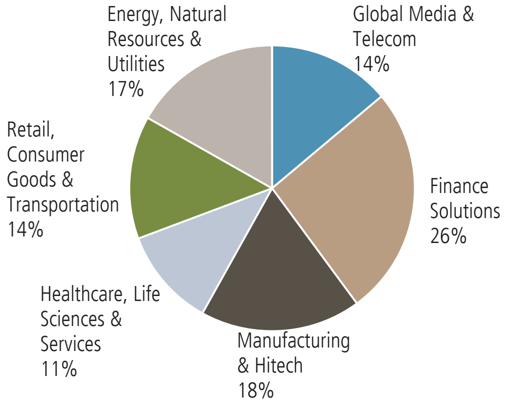
Business description

Wipro is the third-largest IT-services company in India with IT-services revenue of US$6.6bn and 146,053 employees in FY14. Its main verticals are financial services (27%), manufacturing (19%), and telecom and media (14%). Wipro has diversified service offerings in applications development and maintenance, testing and package implementation, infrastructure services, and business process outsourcing. Wipro derives 50% of revenue from the US, 29% from Europe, and the remainder from India and other emerging markets.

Industry outlook

We believe the cyclical demand revival cycle that was the key driver of the revenue surprises in FY14 is close to peaking. In H1 FY15, many large offshore vendors missed consensus revenue expectations with soft revenue growth in absolute terms. We view revenue weakness, despite the seasonal strength normally seen in the first half of the fiscal year, as an early indicator that the demand cycle has reached equilibrium. We expect a combination of vendor-specific and client-specific issues, changes in buyer behaviour and faster-than-expected commoditisation to impact revenue growth in FY15.

Revenues by industry (Q2 FY15)



Source: Company data

EBIT by product segment

(Rs m)	FY10	FY11	FY12	FY13	FY14
Revenue					
IT Services	202,491	234,850	284,313	338,431	399,509
IT Products	38,205	36,910	38,436	39,238	38,785
EBIT					
IT Services	47,392	53,337	59,266	69,933	90,333
IT Products	1,768	1,610	1,787	990	310

Source: Company data

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Wipro Ltd. (WIPR.BO)

Income statement (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Revenues	**371,971**	**430,980**	**437,628**	**476,720**	8.9	**515,327**	8.1	**558,916**	**603,676**	**648,093**
Gross profit	108,797	133,256	142,139	150,767	6.1	160,831	6.7	169,400	177,319	183,129
EBITDA (UBS)	**70,864**	**83,354**	**100,458**	**105,883**	5.4	**113,107**	6.8	**119,271**	**124,268**	**128,011**
Depreciation & amortisation	(10,129)	(10,835)	(11,106)	(12,314)	10.9	(12,883)	4.6	(13,973)	(15,092)	(16,202)
EBIT (UBS)	**60,735**	**72,519**	**89,352**	**93,569**	4.7	**100,224**	7.1	**105,298**	**109,176**	**111,809**
Associates & investment income	333	(105)	0	0	-	0	-	0	0	0
Other non-operating income	3,277	2,626	0	0	-	0	-	0	0	0
Net interest	5,404	10,005	11,653	15,960	37.0	18,650	16.9	21,282	23,940	26,929
Exceptionals (incl goodwill)	0	0	0	0	-	0	-	0	0	0
Profit before tax	**69,749**	**85,045**	**101,005**	**109,529**	8.4	**118,874**	8.5	**126,580**	**133,116**	**138,738**
Tax	(13,762)	(18,349)	(22,601)	(24,735)	-9.4	(26,747)	-8.1	(28,481)	(29,951)	(31,216)
Profit after tax	**55,987**	**66,696**	**78,404**	**84,794**	8.1	**92,128**	8.6	**98,100**	**103,165**	**107,522**
Preference dividends	0	0	0	0	-	0	-	0	0	0
Minorities	(256)	(337)	(438)	(557)	-27.2	(565)	-1.4	(588)	(612)	(636)
Extraordinary items	0	0	0	0	-	0	-	0	0	0
Net earnings (local GAAP)	**55,731**	**66,359**	**77,966**	**84,237**	8.0	**91,563**	8.7	**97,512**	**102,553**	**106,886**
Net earnings (UBS)	**55,731**	**66,359**	**77,966**	**84,237**	8.0	**91,563**	8.7	**97,512**	**102,553**	**106,886**
Tax rate (%)	19.7	21.6	22.4	22.6	0.9	22.5	-0.4	22.5	22.5	22.5

Per share (Rs)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
EPS (UBS, diluted)	22.69	26.98	31.66	34.13	7.8	36.95	8.2	39.19	41.05	42.61
EPS (local GAAP, diluted)	22.69	26.98	31.66	34.13	7.8	36.95	8.2	39.19	41.05	42.61
EPS (UBS, basic)	22.76	27.05	31.76	34.13	7.5	36.95	8.2	39.19	41.05	42.61
Net DPS (Rs)	6.02	7.02	8.03	9.00	12.1	9.00	0.0	9.00	9.00	9.00
Cash EPS (UBS, diluted)[1]	26.82	31.39	36.17	39.12	8.2	42.14	7.7	44.81	47.09	49.07
Book value per share	116.52	115.91	140.29	164.07	17.0	189.51	15.5	218.20	248.65	280.53
Average shares (diluted)	2,455.96	2,459.18	2,462.63	2,467.95	0.2	2,478.28	0.4	2,488.20	2,498.17	2,508.18

Balance sheet (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Cash and equivalents	119,627	154,009	174,758	224,454	28.4	276,131	23.0	335,402	400,214	469,018
Other current assets	153,861	153,394	179,928	193,611	7.6	205,110	5.9	223,571	238,564	258,994
Total current assets	**273,488**	**307,403**	**354,686**	**418,066**	17.9	**481,242**	15.1	**558,973**	**638,778**	**728,012**
Net tangible fixed assets	58,988	50,525	51,449	55,135	7.2	59,752	8.4	63,779	67,187	69,985
Net intangible fixed assets	72,166	56,470	65,358	65,301	-0.1	65,301	0.0	65,301	65,301	65,301
Investments / other assets	31,359	25,332	30,811	30,811	0.0	30,811	0.0	30,811	30,811	30,811
Total assets	**436,001**	**439,730**	**502,304**	**569,313**	13.3	**637,106**	11.9	**718,865**	**802,077**	**894,110**
Trade payables & other ST liabilities	81,237	81,778	95,773	101,902	6.4	105,485	3.5	114,453	119,906	129,921
Short term debt	36,448	62,962	40,683	40,683	0.00	40,683	0.00	40,683	40,683	40,683
Total current liabilities	**117,685**	**144,740**	**136,456**	**142,585**	4.5	**146,168**	2.5	**155,136**	**160,589**	**170,604**
Long term debt	22,510	854	10,909	10,364	-5.0	9,845	-5.0	9,353	8,885	8,441
Other long term liabilities	9,643	9,153	10,053	10,053	0.0	10,053	0.0	10,053	10,053	10,053
Preferred shares	0	0	0	0	-	0	-	0	0	0
Total liabilities (incl pref shares)	**149,838**	**154,747**	**157,418**	**163,002**	3.5	**166,066**	1.9	**174,542**	**179,527**	**189,098**
Common s/h equity	285,314	283,812	343,499	404,924	17.9	469,653	16.0	542,936	621,163	703,625
Minority interests	849	1,171	1,387	1,387	0.0	1,387	0.0	1,387	1,387	1,387
Total liabilities & equity	**436,001**	**439,730**	**502,304**	**569,313**	13.3	**637,106**	11.9	**718,865**	**802,077**	**894,110**

Cash flow (Rsm)	03/12	03/13	03/14	03/15E	% ch	03/16E	% ch	03/17E	03/18E	03/19E
Net income (before pref divs)	55,731	66,359	77,966	84,237	8.0	91,563	8.7	97,512	102,553	106,886
Depreciation & amortisation	10,129	10,835	11,106	12,314	10.9	12,883	4.6	13,973	15,092	16,202
Net change in working capital	(19,482)	2,822	(10,282)	(7,554)	26.5	(7,917)	-4.8	(9,493)	(9,540)	(10,416)
Other operating	(6,302)	(9,594)	(10,895)	(15,960)	-46.5	(18,650)	-16.9	(21,282)	(23,940)	(26,929)
Operating cash flow	**40,076**	**70,422**	**67,895**	**73,037**	7.6	**77,879**	6.6	**80,710**	**84,166**	**85,743**
Tangible capital expenditure	(12,203)	(10,145)	(7,822)	(16,000)	-104.6	(17,500)	-9.4	(18,000)	(18,500)	(19,000)
Intangible capital expenditure	(7,920)	(3,074)	(2,985)	0	-	0	-	0	0	0
Net (acquisitions) / disposals	0	0	0	0	-	0	-	0	0	0
Other investing	12,067	(40,191)	8,033	16,017	-	18,650	-	21,282	23,940	26,929
Investing cash flow	**(8,056)**	**(53,410)**	**(2,774)**	**17**	-	**1,150**	NM	**3,282**	**5,440**	**7,929**
Equity dividends paid	(17,229)	(17,080)	(23,273)	(25,988)	-11.7	(26,096)	-0.4	(26,201)	(26,306)	(26,411)
Share issues / (buybacks)	22	9	6	3,176	NM	(738)	-	1,972	1,980	1,988
Other financing	(902)	(1,044)	(937)	0	-	0	-	0	0	0
Change in debt & pref shares	712	11,394	(10,768)	(545)	94.93	(518)	5.00	(492)	(468)	(444)
Financing cash flow	**(17,397)**	**(6,721)**	**(34,972)**	**(23,357)**	33.2	**(27,353)**	-17.1	**(24,721)**	**(24,794)**	**(24,868)**
Cash flow inc/(dec) in cash	**14,623**	**10,291**	**30,149**	**49,696**	64.8	**51,677**	4.0	**59,271**	**64,812**	**68,804**
FX / non cash items	(5,419)	24,091	(9,400)	0	-	0	-	0	0	0
Balance sheet inc/(dec) in cash	**9,204**	**34,382**	**20,749**	**49,696**	139.5	**51,677**	4.0	**59,271**	**64,812**	**68,804**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.[1]Cash EPS (UBS, diluted) is calculated using UBS net income adding back depreciation and amortization.

Wipro Ltd. (WIPR.BO)

Valuation (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
P/E (local GAAP, diluted)	17.7	14.4	14.6	16.2	15.0	14.1	13.5	13.0
P/E (UBS, diluted)	17.7	14.4	14.6	16.2	15.0	14.1	13.5	13.0
P/CEPS	15.0	12.4	12.8	14.1	13.1	12.3	11.7	11.3
Equity FCF (UBS) yield %	2.0	6.0	5.0	4.2	4.5	4.6	4.9	4.9
Net dividend yield (%)	1.5	1.8	1.7	1.6	1.6	1.6	1.6	1.6
P/BV x	3.5	3.4	3.3	3.4	2.9	2.5	2.2	2.0
EV/revenues (core)	2.4	2.0	2.3	2.5	2.2	2.0	1.7	1.5
EV/EBITDA (core)	12.8	10.6	10.2	11.4	10.2	9.2	8.3	7.6
EV/EBIT (core)	14.9	12.1	11.5	12.9	11.5	10.4	9.5	8.7
EV/OpFCF (core)	14.9	12.1	11.5	12.9	11.5	10.4	9.5	8.7
EV/op. invested capital	4.9	4.2	4.9	5.3	4.8	4.4	3.9	3.5

Enterprise value (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Market cap.	984,773	954,342	1,133,280	1,353,319	1,353,319	1,353,319	1,353,319	1,353,319
Net debt (cash)	(75,666)	(75,431)	(106,679)	(148,287)	(199,505)	(255,485)	(318,006)	(385,270)
Buy out of minorities	849	1,171	1,387	1,387	1,387	1,387	1,387	1,387
Pension provisions/other	0	0	0	0	0	0	0	0
Total enterprise value	**909,956**	**880,082**	**1,027,988**	**1,206,419**	**1,155,201**	**1,099,222**	**1,036,700**	**969,436**
Non core assets	(3,232)	0	0	0	0	0	0	0
Core enterprise value	**906,724**	**880,082**	**1,027,988**	**1,206,419**	**1,155,201**	**1,099,222**	**1,036,700**	**969,436**

Growth (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Revenue	19.8	15.9	1.5	8.9	8.1	8.5	8.0	7.4
EBITDA (UBS)	8.3	17.6	20.5	5.4	6.8	5.4	4.2	3.0
EBIT (UBS)	6.1	19.4	23.2	4.7	7.1	5.1	3.7	2.4
EPS (UBS, diluted)	5.0	18.9	17.3	7.8	8.2	6.1	4.7	3.8
Net DPS	-0.4	16.7	14.3	12.1	0.0	0.0	0.0	0.0

Margins & Profitability (%)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Gross profit margin	29.2	30.9	32.5	31.6	31.2	30.3	29.4	28.3
EBITDA margin	19.1	19.3	23.0	22.2	21.9	21.3	20.6	19.8
EBIT margin	16.3	16.8	20.4	19.6	19.4	18.8	18.1	17.3
Net earnings (UBS) margin	15.0	15.4	17.8	17.7	17.8	17.4	17.0	16.5
ROIC (EBIT)	32.9	34.8	42.9	41.2	41.9	41.8	41.1	40.1
ROIC post tax	26.4	27.3	33.3	31.9	32.5	32.4	31.9	31.1
ROE (UBS)	21.2	23.3	24.9	22.5	20.9	19.3	17.6	16.1

Capital structure & Coverage (x)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Net debt / EBITDA	(0.9)	(1.1)	(1.2)	(1.6)	(2.0)	(2.4)	(2.8)	(3.3)
Net debt / total equity %	(21.2)	(31.6)	(35.7)	(42.7)	(47.9)	(52.4)	(56.3)	(59.6)
Net debt / (net debt + total equity) %	(26.9)	(46.3)	(55.6)	(74.5)	(91.9)	NM	NM	NM
Net debt/EV	(6.7)	(10.2)	(12.0)	(14.4)	(19.5)	(26.0)	(33.8)	(43.3)
Capex / depreciation %	120.5	93.6	70.4	129.9	135.8	128.8	122.6	117.3
Capex / revenue %	3.3	2.4	1.8	3.4	3.4	3.2	3.1	2.9
EBIT / net interest	NM	NM	NM	NM	NM	NM	NM	NM
Dividend cover (UBS)	3.8	3.9	4.0	3.8	4.1	4.4	4.6	4.7
Div. payout ratio (UBS) %	26.4	25.9	25.3	26.4	24.4	23.0	21.9	21.1

Revenues by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	371,971	430,980	437,628	476,720	515,327	558,916	603,676	648,093
Total	**371,971**	**430,980**	**437,628**	**476,720**	**515,327**	**558,916**	**603,676**	**648,093**

EBIT (UBS) by division (Rsm)	03/12	03/13	03/14	03/15E	03/16E	03/17E	03/18E	03/19E
Others	60,735	72,519	89,352	93,569	100,224	105,298	109,176	111,809
Total	**60,735**	**72,519**	**89,352**	**93,569**	**100,224**	**105,298**	**109,176**	**111,809**

Source: Company accounts, UBS estimates. (UBS) metrics use reported figures which have been adjusted by UBS analysts.

Statement of Risk

A sharp decline in IT spending or currency appreciation could result in downward revisions to our earnings estimates. Technology sector investing involves a high degree of risk. Rapid technological changes, increasing competition, and exposure to macroeconomic cycles are among the many risks faced by investors. Moreover, it is extremely difficult to project the financial results of tech companies since their operating models are highly volatile and unpredictable. Finally, valuing tech stocks can prove challenging, as traditional and non-traditional valuation measures have not provided much insight into how these stocks trade.

Required Disclosures

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UBS Investment Research: Global Equity Rating Definitions

12-Month Rating	Definition	Coverage[1]	IB Services[2]
Buy	FSR is > 6% above the MRA.	47%	34%
Neutral	FSR is between -6% and 6% of the MRA.	42%	28%
Sell	FSR is > 6% below the MRA.	11%	21%
Short-Term Rating	**Definition**	**Coverage[3]**	**IB Services[4]**
Buy	Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%
Sell	Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.	less than 1%	less than 1%

Source: UBS. Rating allocations are as of 30 September 2014.
1:Percentage of companies under coverage globally within the 12-month rating category. 2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
3:Percentage of companies under coverage globally within the Short-Term rating category. 4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

KEY DEFINITIONS: Forecast Stock Return (FSR) is defined as expected percentage price appreciation plus gross dividend yield over the next 12 months. **Market Return Assumption (MRA)** is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium). **Under Review (UR)** Stocks may be flagged as UR by the analyst, indicating that the stock's price target and/or rating are subject to possible change in the near term, usually in response to an event that may affect the investment case or valuation. **Short-Term Ratings** reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case. **Equity Price Targets** have an investment horizon of 12 months.

EXCEPTIONS AND SPECIAL CASES: UK and European Investment Fund ratings and definitions are: Buy: Positive on factors such as structure, management, performance record, discount; **Neutral:** Neutral on factors such as structure, management, performance record, discount; **Sell:** Negative on factors such as structure, management, performance record, discount. **Core Banding Exceptions (CBE):** Exceptions to the standard +/-6% bands may be granted by the Investment Review Committee (IRC). Factors considered by the IRC include the stock's volatility and the credit spread of the respective company's debt. As a result, stocks deemed to be very high or low risk may be subject to higher or lower bands as they relate to the rating. When such exceptions apply, they will be identified in the Company Disclosures table in the relevant research piece.

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UBS AG Hong Kong Branch: Diviya Nagarajan. **UBS Limited:** Michael Briest; Tal Grant, CFA. **UBS Securities LLC:** Steven Milunovich, CFA; Peter Christiansen, CFA, CMT.

Company Disclosures

Company Name	Reuters	12-month rating	Short-term rating	Price	Price date
Accenture PLC-CL A[16]	ACN.N	Neutral	N/A	US$83.24	06 Nov 2014
Atos	ATOS.PA	Buy	N/A	€55.30	06 Nov 2014
Capgemini[5]	CAPP.PA	Buy	N/A	€54.28	06 Nov 2014
Cognizant Technology Solutions[3, 4, 5, 6a, 6b, 7, 16]	CTSH.O	Buy	N/A	US$52.64	06 Nov 2014
EPAM Systems[16]	EPAM.N	Buy	N/A	US$47.92	06 Nov 2014
HCL Technologies	HCLT.BO	Neutral	N/A	Rs1,602.95	05 Nov 2014
Infosys Ltd[16]	INFY.BO	Sell	N/A	Rs4,126.00	05 Nov 2014
International Business Machines Corp.[6a, 6b, 6c, 7, 12, 16]	IBM.N	Neutral	N/A	US$161.46	06 Nov 2014
Luxoft Holding[5, 16, 18]	LXFT.N	Buy	N/A	US$38.39	06 Nov 2014
Tata Consultancy Services Ltd.	TCS.BO	Neutral	N/A	Rs2,600.85	05 Nov 2014
Tech Mahindra	TEML.BO	Neutral	N/A	Rs2,612.40	05 Nov 2014
Wipro Ltd.[16]	WIPR.BO	Buy	N/A	Rs559.00	05 Nov 2014

Source: UBS. All prices as of local market close.
Ratings in this table are the most current published ratings prior to this report. They may be more recent than the stock pricing date

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