

IT Services

Sector Update

December 3, 2020

Exhibit 1: PL Universe

Companies	Rating	CMP (Rs)	TP (Rs)
TCS	BUY	2,750	3,200
Infosys	BUY	1,141	1,436
Wipro	BUY	359	415
HCL Tech	BUY	843	1,101
Tech M	BUY	909	1,042
L&T Infotech	BUY	3,394	3,465
Mindtree	BUY	1,414	1,625
Mphasis	BUY	1,336	1,711
COFORGE	BUY	2,443	2,784
Persistent	BUY	1,212	1,368
Zensar	BUY	222	215
L&T Tech.	Accumulate	1,785	1,860
Cyient	BUY	475	492

Source: Company, PL

Aniket Pande
aniketpande@plindia.com | 91-22-66322300

Aditi Patil
aditipatil@gmail.com |

Technology Spends in virtuous cycle

Quick Pointers:

- 3QCY20 US Bank's technology spends rose sharply as CITI/GS/BOA/JPM reported 6.1%/20.1%/14.6%/2.8% YoY growth in tech spends.
- Large retailers like Walmart/Home Depot/Target reported a sharp 80%/79%/155% YoY growth in Ecom sales
- Indian IT companies to see higher growth led by vendor consolidation, captive carve-outs, digital core transformation & enhancing customer experience.

COVID has accelerated the pace of digital adoption forcing companies to invest in technology in order to remain relevant for their customers. The strong deals won by IT companies in last two quarters in BFSI and Retail sector completely align with the strategies of different CXO's of saving costs and increasing revenues via digital transformation. Higher spending will likely result in increasing opportunities for IT services companies.

Despite the sector's recent re-rating to +2-SD, we extend our positive view as we believe technology spends will sustain in coming quarters. Indian IT sector will show healthy growth from improved technology spends of BFSI and Retail firms across US and Europe. Infosys and TCS will lead the growth in Tier 1 companies. LTI and Mphasis will benefit due to their proved domain expertise in BFS among midcaps.

BFSI and Retail spends on a fast growth clip

- Major US Banks reported better-than-expected results in 3QCY20 as they remain committed to their targets for cost reduction and operational efficiency.
- Most of the large US Banks experienced accelerated digital adoption and believe that it will persist post COVID.
- BFSI firms are spending on cost take out projects, vendor consolidation, strengthening risk management systems and meeting digital needs of clients & employees.
- Large retailers have gained market share from their financially weak competitors who had to shut down stores early in the pandemic.
- Big-box retail chains have logged strong sales through the holiday season because people are not spending money on things like travel, dine-outs, sporting events, concerts etc.
- Retailers are heavily investing in ecommerce so as to reduce per-unit costs while coping up with an online surge.
- For both BFSI & Retail new technology investments will be funded via cost take out from legacy technology or from optimizing business operations.

BFSI – Tech spend to remain resilient

- **Sharp rise in tech spends of BFSI firms in 3QCY20:** US Bank's technology spends have risen sharply with CITI/GS/BOA/JPM reporting 6.1%/20.1%/14.6%/2.8% YoY growth in tech spends in 3QCY20.
 - Wells Fargo significantly invested in technology (tech spend was 4.2% of revs in 3Q20 vs 0.7% in 2Q20) to address prior underinvestment in risk and controls.
 - In October CITI was fined US\$400mn by US authorities over deficiencies in risk management practices. *CITI is now laser focused on reducing manual touchpoints and automating operational infrastructure and controls. It is on track to spend US\$1bn incremental investments in 2020.*
 - Most of the large US Banks experienced accelerated digital adoption and believe that it will persist post COVID. JPM's digital deposits now represent more than 40% of all check-deposits versus 30% pre-COVID.

Exhibit 2: Sharp rise in technology spend of US Banks in 3QCY20

Tech Spends (YoY growth)	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
CITI	-4.1%	-1.3%	1.0%	0.2%	1.0%	6.1%
J.P. Morgan Chase & Co	9.7%	12.4%	9.5%	9.1%	8.9%	2.8%
Goldman Sachs	11.5%	13.2%	17.6%	12.2%	19.0%	20.1%
Bank of America	3.2%	4.5%	0.5%	3.9%	9.3%	14.6%

Source: Company, PL

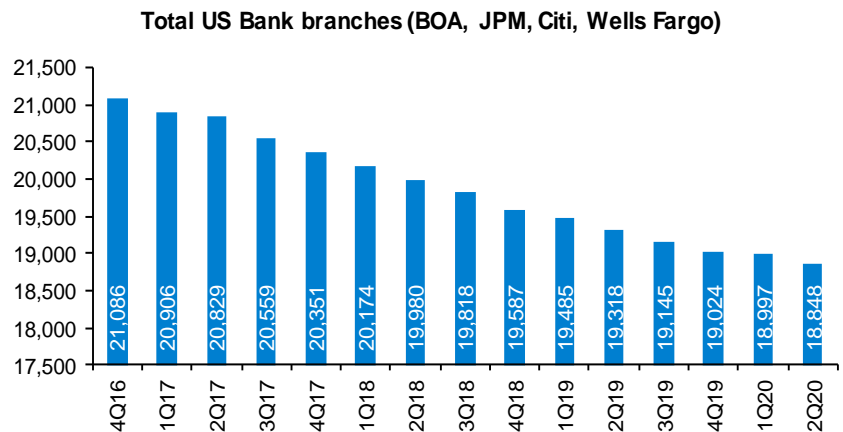
- **BFSI firms investing in technology to reduce costs and enhance CX:** BFSI firms are spending on cost take out projects, captive carve-outs, vendor consolidation, strengthening risk management systems and meeting enhanced digital needs of clients & employees.
 - UBS US wealth advisory business has made technology enhancements in their billing system to better reflect client's assets throughout the quarter. This improved their billing system generating substantial cost savings.
 - *COVID has changed the usual rhythm of M&A processes with Investment Banks like Goldman Sachs using drone technology to give their clients a bird's-eye view of the companies they are bidding on.* Banks continue to strengthen digital platforms in order to improve customer engagement. Bank of America continues to invest in integration of digital platforms across business lines such as consumer banking and investments.
- **How are BFSI firms funding tech spends?** New technology investments will be funded via cost take out from legacy technology or from optimizing business operations. Factors like savings from travel, lower staff bonus and certain discretionary expenses have provided a funding avenue to technology spends during the pandemic.
 - **Standard Chartered highlighted that having a tight lid on costs created capacity to invest even harder in this quarter.** As, digital and mobile banking have grown, banks have chosen to close a certain percentage of their physical branches to reduce expenditures.

Physical bank branches of 4 large US Banks (BOA, JPM, CITI, Wells Fargo) put together have reduced by 12.6% in last three years.

Most US Banks remain optimistic on managing a lower interest rate environment and remain committed to targets for cost reduction and operational efficiency.

- Investments in digitalization and automation create cost efficiencies which can fund further investments thereby creating a virtuous cycle. Most US Banks remain optimistic on lower interest rate environment and remain committed to target for cost reduction and operational efficiency.

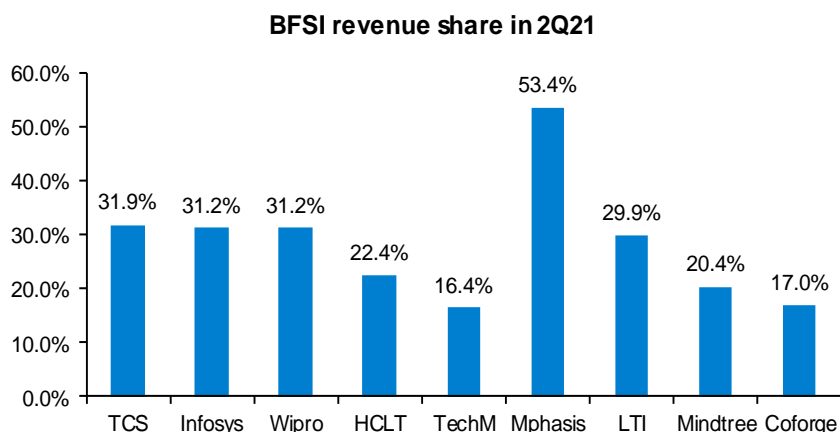
Exhibit 3: Decline in bank branches by 12.6% in last three years



Source: Company, PL

- Strong sequential recovery of Tier 1 IT BFSI revenues:** Tier 1 IT companies reported strong revenue growth of 7.7% QoQ USD in the BFSI vertical.
 - Infosys mentioned that uptick in business has been in areas that banks are investing in significantly post COVID such as mortgage servicing, call center technology and operations, lending services catering to various government relief programs, as well as pickup of large digital transformation programs.
 - 6 large deals signed in BFSI vertical in Q2, including the Vanguard deal should drive revenue growth for Infosys in the coming quarters.** LTI stated that its top account – a large US Bank is growing handsomely with client being even more tech savvy than ever before.
 - TCS signed BFSI deals of TCV of \$1.7 billion in 2QFY21.** TechM reported strong 24%YoY growth on the back of revenues coming from Jackson Life Insurance mega deal.
 - Mphasis reported strong growth in its Banking and Capital Markets vertical (17.4% QoQ, 25.2% YoY) in 2Q21 as it won deals against some of the larger names. Many of their large clients underwent vendor consolidation exercises with Mphasis gaining market share.

Exhibit 4: BFSI contributes largest to the revenues for most IT companies



Source: Company, PL

Exhibit 5: Strong sequential recovery in BFSI growth for TCS, Infy, Mphasis, LTI & Coforge

QoQ Growth	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
Infosys	3.2%	-0.4%	1.7%	4.2%	-0.2%	-2.0%	-1.8%	7.8%
TCS	-0.6%	3.1%	1.3%	1.2%	-0.7%	-4.8%	-2.1%	9.3%
Wipro	4.8%	1.7%	-1.5%	-0.4%	0.9%	-2.6%	-6.4%	5.4%
HCLT	-1.5%	1.1%	-0.2%	16.0%	-1.3%	-2.3%	-1.7%	5.0%
Tech M	2.7%	-1.7%	-3.9%	4.8%	6.7%	10.9%	-4.2%	9.4%
Total (Top-5 Tier 1)	1.2%	1.6%	0.5%	3.6%	-0.1%	-2.7%	-2.7%	7.7%
Mphasis	-1.8%	3.8%	2.6%	5.3%	3.6%	1%	2.1%	17.4%
LTI	2.8%	-2.9%	0.8%	-0.2%	11.2%	3.2%	-4.4%	11.9%
Mindtree	-1.1%	4.7%	-0.2%	2.6%	0.1%	-3.1%	-9.4%	3.5%
Coforge	-1.7%	7.2%	0.4%	14.1%	-4.3%	-4%	2.7%	10.2%

Source: Company, PL

Exhibit 6: Infy, TechM, Mphasis & LTI had strong YoY growth in their BFSI revenues

YoY Growth	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
Infosys	9.4%	8.5%	11.3%	10.3%	6.2%	5.7%	2.1%	2.9%
TCS	8.6%	7.7%	9.2%	8%	5.3%	-1.3%	-4.9%	-1.1%
Wipro	17.5%	15.9%	11.2%	5.9%	1%	-1.3%	-6.9%	-3.3%
HCLT				10%	16.8%	14.1%	11.7%	-2.5%
Tech M	5.1%	2.6%	-4.1%	1.8%	5.7%	19.3%	18.8%	24%
Mphasis	3.8%	3.6%	5%	10.1%	16.1%	12.9%	12.3%	25.3%
LTI	28.6%	14.4%	2%	1.9%	9.3%	17.2%	10.6%	21.2%
Mindtree	2.7%	12.3%	6%	6.1%	7.4%	-0.7%	-9.8%	-9%
Coforge	3.8%	12.9%	4.9%	20.7%	17.5%	5.2%	7.6%	3.9%

Source: Company, PL

Exhibit 7: Strong deal wins in BFSI

	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
Infosys								
Number of large deal wins in BFSI	4	3	3	4	7	1	5	6
Total number of large deal wins	14	13	13	13	14	12	15	16
TCS								
TCV of deal wins in BFSI (US\$ bn)	NA	NA	2.0	2.2	1.8	2.4	2.1	1.7
Total TCV of deal wins (US\$ bn)	5.9	6.2	5.7	6.4	6.0	8.9	6.9	8.6

Source: Company, PL

Online sales as % of total revenues rose 2x times for Home Depot and Target led by increase in demand for stay-at-home goods in this pandemic.

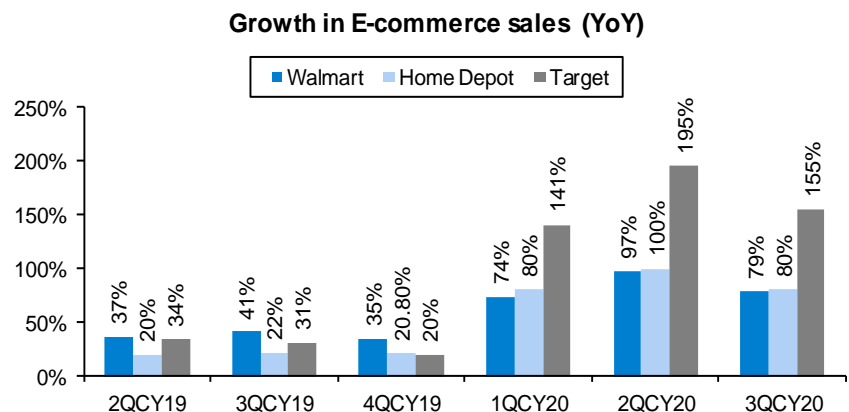
The U.S. National Retail Federation expects Nov and Dec sales, to rise in a range of 3.6% to 5.2%, to between \$755.3- \$766.7 bn compared to 4% jump last year and an average increase of 3.5% over the past five years. The estimate includes online sales, which are expected to rise 20% to 30%.

Home Depot has implemented automation in their Rapid Deployment Centers which has reduced product lead times, better in-store replenishment and improved fulfillment options translating to over 300 bps of QoQ improvement in customer satisfaction scores in 3QCY20.

Retail - Surge in E-com to drive tech spend

- **Retailers experience accelerated digital adoption:** Large retailers experienced sharp rise in e-commerce sales for past two quarters. YoY growth in e-commerce sales for Walmart/Home Depot/Target was robust 80%/79%/155% in 3QCY20.
- Large retailers indicated that the rising trend in ecommerce and omni-channel penetration has accelerated by 2-3 years in some cases and expect digital adoption to be sticky post COVID.
- Walmart's 3QCY20 comparable U.S. sales rose 6.4%, a slower pace than earlier in the pandemic, as it reported a big jump in e-commerce sales but a sharp drop in visits to its stores.
- Kohl stated that their omni-channel customer is 6x more productive than a digital-only customer and 4x more productive than a store-only customer.
- Thanksgiving online shopping hit a new record with sales increasing 22% from a year ago to \$5.1 billion.
- Similarly, Black Friday online sales increased 22% over last year, reaching \$9 billion (Source: Adobe Analytics).

Exhibit 8: Accelerated growth of E-commerce sales of US Retailers



Source: Company, PL

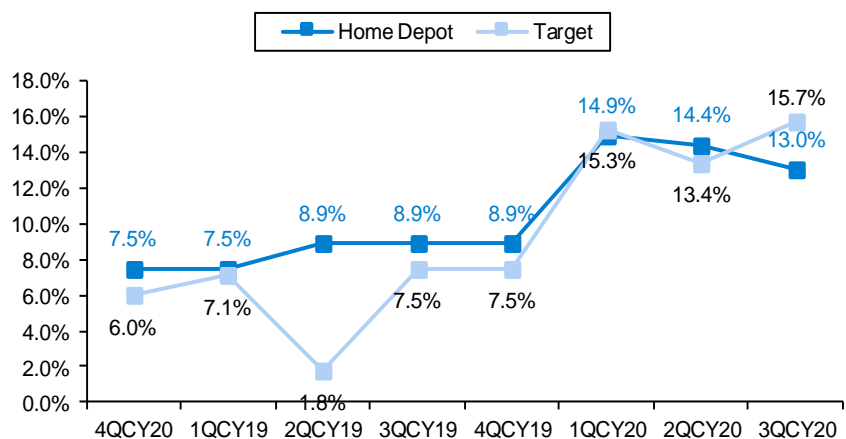
- Big-box chains such as Walmart, Target Corp and Home Depot Inc have been able to stay open and log stronger sales through the pandemic as people are not spending money on travel, dine-outs, sporting events, concerts etc.
- **Customer experience and core modernization drive Retail tech spends:** Retailers continue to invest in new retail formats like mobile-enabled vending machines and contactless checkout to provide new, safer ways to reach shoppers in person.
- Target has introduced "See IT in Your Space" technology i.e. a 3D rendering feature which is 2x more likely to drive in sales.

Across the industry, holiday promotions are running below year-ago levels for categories including apparel, electronics and home goods aided by lean inventory management

TCS mentioned that bankruptcy itself is positive driver for retail because path out of bankruptcy will be technology driven.

- Walmart is using Machine Learning to improve efficiency of order fulfillment so as to cope up with accelerated growth it is witnessing in e-commerce sales. The pandemic drove an increase in demand for faster delivery, in turn spurring greater investment for on-demand tech in Q2.
- Home Depot implemented automation in their Rapid Deployment Centers which reduced product lead times, better in-store replenishment and improved fulfillment options translating to over 300 bps of QoQ improvement in customer satisfaction scores in 3QCY20.
- Walmart is also using AI for automatically selecting substitute for out-of-stock product without any intervention of store associate. With rising demand for Omni-channel (vs online only or in-store only sales), retailers are now focusing on modernizing their core to make their systems more robust and resilient plus provide seamless experience across all three sales channels. Also as retailers embrace data as essential to their business, cloud computing is becoming more important.

Exhibit 9: 2x rise in online sales as % of total revenue



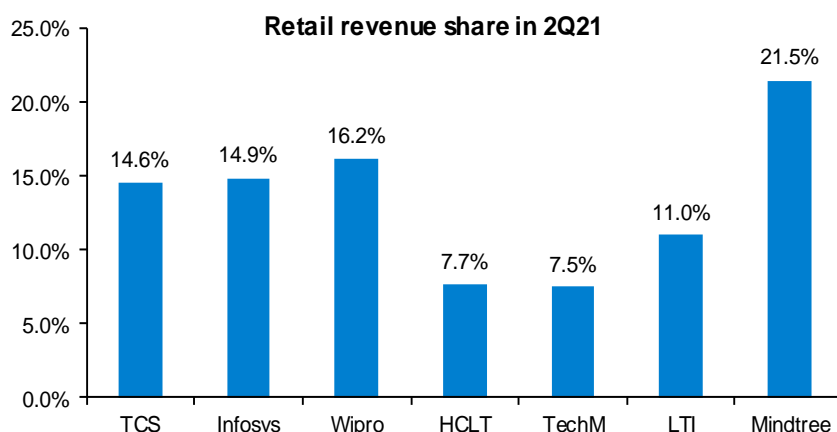
Source: Company, PL

- Retailers are heavily investing in technologies such as 1) contact less shopping and expanding touch points 2) adding new features to improve visual experience of website/mobile application 3) increasing automation in the e-commerce supply chain so as to reduce per-unit costs 4) Omni-channel management 4) core modernization and cloud migration 5) using AI/ML to drive in more value via personalization of offerings.
- Survivors will invest more in technology to avoid bankruptcy:** Large retailers are gaining share from their less tech savvy competitors who had to shut down stores early in the pandemic.
 - Target Corp's comparable sales jumped more than 20% for a second straight quarter as it made broad gains in market share.
 - Higher online sales have also helped companies leverage fixed expenses in online channel while pick-up options like pick-up-from-store and curbside-pick-up have lowered variable cost of ecommerce sales. For example, Gap Inc's Buy-online-pickup-in-store and Curbside-pickup increased over 50% in 3QCY20 helping them improve operating costs

across fleet. Kohl's indicated increasing technology usage to automate task-based work.

- Retailers are significantly reducing costs by (1) winding up unprofitable stores, (2) lease negotiations, (3) expanding product margins using lean inventory management taking away the need for blanket promotions and deep discounts (4) automating operations in distribution and fulfillment centers to reduce per-unit delivery costs 5) reducing the number of SKUs to focus on highest demand products.
- **Sharp rebound in Tier 1 IT Retail revenues:** Tier 1 IT revenues rebounded sharply posting 9.8% QoQ growth in 2Q21 (vs -15.2% QoQ in 1Q21).
 - TCS retail order book was at \$1bn in 2Q21. TCS solutions related to dynamic pricing have been their hallmark in retail space. **TCS mentioned that bankruptcy itself is positive driver for retail because path out of bankruptcy will be technology driven.**
 - Infosys won 3 deals in Retail, however they remain cautious because of liquidity issues and possibly increased furloughs in coming months.
 - John Lewis partnership with Wipro and Walgreen TCS deal are good examples of Indian IT Services gaining from outsourcing boost triggered by the pandemic.

Exhibit 10: Retail accounts to second largest vertical for TCS & Infy



Source: Company, PL

Note: Mindtree reports Manufacturing + Retail combined revenues

Exhibit 11: Sharp sequential rebound in Retail growth of Tier 1 IT companies

QoQ Growth	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
Infosys	-0.2%	-0.7%	1.7%	-1.4%	1.7%	-0.1%	-9.9%	10.6%
TCS	1.3%	0.1%	1.0%	-0.8%	4.0%	-1.3%	-15.5%	11.8%
Wipro	1.2%	5.3%	-5.4%	3.1%	8.0%	-1.6%	-12.3%	5.6%
HCLT	7.0%	1.5%	-1.4%	10.7%	5.4%	-1.0%	-31.0%	7.8%
Tech M	6.7%	-4.0%	-4.7%	16.5%	8.1%	-3.0%	-6.5%	7.4%
Total (Top-5)	1.8%	0.8%	-0.5%	1.7%	4.5%	-1.1%	-15.2%	9.8%
LTI	9.7%	2.0%	5.5%	5.7%	5.6%	3.9%	-2.2%	-0.9%
Mindtree	4.9%	3.7%	0.8%	0.3%	-3.6%	-0.3%	-7.7%	7.7%

Source: Company, PL

Exhibit 12: Strong YoY growth in Retail revenues for Infy, TechM and LTI

YoY Growth	Q3FY19	Q4FY19	Q1FY20	Q2FY20	Q3FY20	Q4FY20	Q1FY21	Q2FY21
Infosys	9.8%	9.1%	5.3%	-0.6%	1.3%	1.8%	-9.8%	1.1%
TCS	1.8%	-1.3%	5.8%	1.7%	4.3%	2.9%	-13.9%	-3.0%
Wipro	1.1%	11.0%	4.5%	3.9%	10.9%	3.6%	-3.9%	-1.5%
HCLT	17.7%	16.4%	20.1%	-0.5%	16.7%	13.9%	-20.3%	-7.6%
Tech M	-1.6%	5.2%	3.5%	13.8%	15.3%	16.5%	14.3%	5.3%
Total (Top-5)	5.1%	5.4%	6.8%	1.7%	6.6%	4.6%	-10.8%	-1.8%
LTI	36.2%	34.9%	35.9%	24.9%	20.1%	22.4%	13.4%	6.4%
Mindtree	12.3%	9.4%	5.1%	10.0%	1.1%	-2.8%	-11.1%	-4.5%

Source: Company, PL

Exhibit 13: Valuation Multiple

Companies	Rating	CMP (Rs)	TP (Rs)	USD Revenue Growth			EBIT Margin			EPS			P/E		
				'21E	'22E	'23E	'21E	'22E	'23E	'21E	'22E	'23E	'21E	'22E	'23E
TCS	BUY	2,750	3,200	-0.4%	11.3%	10.9%	25.1%	26.0%	25.6%	86.3	101.3	111.9	31.9	27.1	24.6
Infosys	BUY	1,141	1,436	3.9%	10.8%	10.4%	24.0%	23.0%	22.5%	46.4	50.8	55.6	24.6	22.5	20.5
Wipro	BUY	359	415	-2.3%	7.9%	6.3%	18.0%	18.2%	18.3%	18.0	20.7	22.7	20.0	17.4	15.8
HCL Tech	BUY	843	1,101	1.8%	11.2%	9.6%	21.0%	21.0%	20.2%	45.6	53.3	56.9	18.5	15.8	14.8
Tech M	BUY	909	1,042	-2.2%	8.7%	9.3%	13.0%	13.7%	14.0%	49.7	58.4	64.2	18.3	15.5	14.2
L&T Infotech	BUY	3,394	3,465	8.1%	15.2%	14.5%	18.6%	18.3%	17.8%	99.2	114.8	138.6	34.2	29.6	24.5
Mindtree	BUY	1,414	1,625	-2.6%	10.9%	10.6%	16.3%	16.9%	16.8%	61.4	73.3	81.4	23.0	19.3	17.4
Mphasis	BUY	1,336	1,711	6.9%	12.8%	10.5%	15.9%	16.8%	16.9%	65.1	79.7	90.2	20.5	16.8	14.8
COFORGE	BUY	2,443	2,784	6.7%	18.7%	16.8%	13.9%	15.0%	14.7%	86.6	112.7	129.4	28.2	21.7	18.9
Persistent	BUY	1,212	1,368	9.8%	11.7%	12.8%	11.9%	12.1%	12.0%	57.0	65.0	71.8	21.3	18.7	16.9
Zensar	BUY	222	215	-8.8%	9.2%	8.2%	11.7%	10.7%	10.3%	16.4	14.9	15.8	13.5	14.9	14.0
L&T Tech.	Accumulate	1,785	1,860	-7.2%	14.1%	9.5%	14.0%	15.9%	15.9%	58.3	77.2	89.3	30.6	23.1	20.0
Cyient	BUY	475	492	-12.0%	9.8%	6.1%	9.2%	11.2%	11.1%	33.0	32.1	39.8	14.4	14.8	11.9

Source: Company, PL

Analyst Coverage Universe

Sr. No.	Company Name	Rating	TP (Rs)	Share Price (Rs)
1	Coforge	BUY	2,784	2,457
2	Cyient	BUY	492	485
3	HCL Technologies	BUY	1,101	830
4	Infosys	BUY	1,436	1,137
5	L&T Technology Services	Accumulate	1,860	1,754
6	Larsen & Toubro Infotech	BUY	3,465	3,100
7	Mindtree	BUY	1,625	1,438
8	Mphasis	BUY	1,711	1,382
9	Persistent Systems	BUY	1,368	1,189
10	Redington (India)	BUY	138	138
11	Sonata Software	BUY	427	339
12	Tata Consultancy Services	BUY	3,200	2,736
13	TeamLease Services	BUY	2,677	2,724
14	Tech Mahindra	BUY	1,042	848
15	Wipro	BUY	415	345
16	Zensar Technologies	BUY	215	225

PL's Recommendation Nomenclature

Buy	: > 15%
Accumulate	: 5% to 15%
Hold	: +5% to -5%
Reduce	: -5% to -15%
Sell	: < -15%
Not Rated (NR)	: No specific call on the stock
Under Review (UR)	: Rating likely to change shortly

ANALYST CERTIFICATION

(Indian Clients)

We/I Mr. Aniket Pande- MBA, Ms. Aditi Patil- MBA Finance Research Analysts, authors and the names subscribed to this report, hereby certify that all of the views expressed in this research report accurately reflect our views about the subject issuer(s) or securities. We also certify that no part of our compensation was, is, or will be directly or indirectly related to the specific recommendation(s) or view(s) in this report.

(US Clients)

The research analysts, with respect to each issuer and its securities covered by them in this research report, certify that: All of the views expressed in this research report accurately reflect his or her or their personal views about all of the issuers and their securities; and No part of his or her or their compensation was, is or will be directly related to the specific recommendation or views expressed in this research report.

DISCLAIMER

Indian Clients

Prabhudas Lilladher Pvt. Ltd, Mumbai, India (hereinafter referred to as "PL") is engaged in the business of Stock Broking, Portfolio Manager, Depository Participant and distribution for third party financial products. PL is a subsidiary of Prabhudas Lilladher Advisory Services Pvt Ltd. which has its various subsidiaries engaged in business of commodity broking, investment banking, financial services (margin funding) and distribution of third party financial/other products, details in respect of which are available at www.plindia.com.

This document has been prepared by the Research Division of PL and is meant for use by the recipient only as information and is not for circulation. This document is not to be reported or copied or made available to others without prior permission of PL. It should not be considered or taken as an offer to sell or a solicitation to buy or sell any security.

The information contained in this report has been obtained from sources that are considered to be reliable. However, PL has not independently verified the accuracy or completeness of the same. Neither PL nor any of its affiliates, its directors or its employees accepts any responsibility of whatsoever nature for the information, statements and opinion given, made available or expressed herein or for any omission therein.

Recipients of this report should be aware that past performance is not necessarily a guide to future performance and value of investments can go down as well. The suitability or otherwise of any investments will depend upon the recipient's particular circumstances and, in case of doubt, advice should be sought from an independent expert/advisor.

Either PL or its affiliates or its directors or its employees or its representatives or its clients or their relatives may have position(s), make market, act as principal or engage in transactions of securities of companies referred to in this report and they may have used the research material prior to publication.

PL may from time to time solicit or perform investment banking or other services for any company mentioned in this document.

PL is in the process of applying for certificate of registration as Research Analyst under Securities and Exchange Board of India (Research Analysts) Regulations, 2014

PL submits that no material disciplinary action has been taken on us by any Regulatory Authority impacting Equity Research Analysis activities.

PL or its research analysts or its associates or his relatives do not have any financial interest in the subject company.

PL or its research analysts or its associates or his relatives do not have actual/beneficial ownership of one per cent or more securities of the subject company at the end of the month immediately preceding the date of publication of the research report.

PL or its research analysts or its associates or his relatives do not have any material conflict of interest at the time of publication of the research report.

PL or its associates might have received compensation from the subject company in the past twelve months.

PL or its associates might have managed or co-managed public offering of securities for the subject company in the past twelve months or mandated by the subject company for any other assignment in the past twelve months.

PL or its associates might have received any compensation for investment banking or merchant banking or brokerage services from the subject company in the past twelve months.

PL or its associates might have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past twelve months

PL or its associates might have received any compensation or other benefits from the subject company or third party in connection with the research report.

PL encourages independence in research report preparation and strives to minimize conflict in preparation of research report. PL or its analysts did not receive any compensation or other benefits from the subject Company or third party in connection with the preparation of the research report. PL or its Research Analysts do not have any material conflict of interest at the time of publication of this report.

It is confirmed that Mr. Aniket Pande- MBA, Ms. Aditi Patil- MBA Finance Research Analysts of this report have not received any compensation from the companies mentioned in the report in the preceding twelve months

Compensation of our Research Analysts is not based on any specific merchant banking, investment banking or brokerage service transactions.

The Research analysts for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

The research analysts for this report has not served as an officer, director or employee of the subject company PL or its research analysts have not engaged in market making activity for the subject company

Our sales people, traders, and other professionals or affiliates may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed herein, and our proprietary trading and investing businesses may make investment decisions that are inconsistent with the recommendations expressed herein. In reviewing these materials, you should be aware that any or all of the foregoing, among other things, may give rise to real or potential conflicts of interest.

PL and its associates, their directors and employees may (a) from time to time, have a long or short position in, and buy or sell the securities of the subject company or (b) be engaged in any other transaction involving such securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company or act as an advisor or lender/borrower to the subject company or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions.

US Clients

This research report is a product of Prabhudas Lilladher Pvt. Ltd., which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by Prabhudas Lilladher Pvt. Ltd. only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, Prabhudas Lilladher Pvt. Ltd. has entered into an agreement with a U.S. registered broker-dealer, Marco Polo Securities Inc. ("Marco Polo").

Transactions in securities discussed in this research report should be effected through Marco Polo or another U.S. registered broker dealer.

Prabhudas Lilladher Pvt. Ltd.

3rd Floor, Sadhana House, 570, P. B. Marg, Worli, Mumbai-400 018, India | Tel: (91 22) 6632 2222 Fax: (91 22) 6632 2209

www.plindia.com