

Industry	TECHNOLOGY
Bloomberg	TECHM IN
BSE CODE	532755

Business seasonality impacted revenue and margins in 1QFY20

RATING	ACCUMULATE
CMP	628
Price Target	706
Potential Upside	12%

Rating Change	
Estimate Change	
Target Change	

Stock Info

52wk Range H/L	846/633
Mkt Capital (Rs Cr)	61764
Free float (%)	64%
Avg. Vol 1M (,000)	2724
No. of Shares (Crs)	96
Promoters Pledged %	0%

Research Analyst

NIHARIKA OJHA
niharika@narnolia.com
+91-22-62701230

1QFY20 Result update

- TECHM posted weak set of numbers in 1QFY20 result. Revenue came in USD1247.1(misses our estimates by 2%), a de-growth of 1.7%QoQ primarily impacted by seasonality in Comivia business .PAT for the quarter stood at Rs 949crore (15.8%QoQ decline) mainly led miss in revenue and margins.
- EBIT during the quarter stood at Rs 993 crore , a de-growth of 15.8%QoQ. The primary reason for the dip in margins by 390bps were 1) impact by portfolio company(more than 100bps);2)salary hike(further 100bps);3)Dip in utilization(60bps);4)one time H1 visa cost(40-45bps);5) currency impacted 40bps ;6) Deal transition and some of the expenses incurred further impacted the margins by 20-30 bps
- Industry wise, Softness was seen across all major segments. Telecom segment declined 3.2%QoQ during the quarter while enterprise remained muted by declining 0.8%QoQ.Barring others (includes healthcare, life science and public-sector) which grew 14.8%QoQ, all the other segments in enterprise reported a de-growth. Retail declined 4.7%QoQ due to seasonality, BFSI declined 3.9%QoQ and continued decline was seen in manufacturing segment (declined 5.5%QoQ)
- Digital continued to remain strong by growing 3.8%QoQ and 37.4% YoY during the quarter. It now contributes 36% of the overall revenue.
- The management is seeing communication growth higher than last year and enterprise growth to be in and around mid single digit for FY20.

View and Valuation

TECHM has soft start to the year with revenue declining 1.7% QoQ while margin contracted by 390bps to 11.5%. TCV deal wins remained healthy during the quarter (USD475mn across Enterprise and Communications).

Going forward, we expect communication to post 7.2%YoY in FY20 on the back of ramp up of deal won in the last few quarters. Also 5G rollout is expected to contribute from CY20 onwards which will accelerate the revenue growth going ahead. While telecom to see improvement, we see enterprise segment to continue to post laggard growth in FY20 due to continued challenges in BFSI and Manufacturing. TCV wins gives some revenue visibility for FY20, However the margin dip in 1QFY20 and continued headwinds like transition costs, investment in people and lower Utilization, we expect to see margin pressure for FY20 (much below their FY19 margin).

Thus we have curtailed our revenue /PAT estimates for FY20 and FY21 by3.2%/7.8% and 2.7%/3.6%. Factoring the margin pressure, we reduce our target price from Rs814 to Rs706 and We downgrade the stock to ACCUMULATE.

Key Risks to our rating and target

- Slower than expected growth in telecom .

Fig in Rs cr

KEY FINANCIAL/VALUATIONS	FY17	FY18	FY19	FY20E	FY21E
Net Sales	29141	30773	34742	35970	39469
EBITDA	4184	4710	6337	6186	6892
EBIT	3206	3625	5208	4904	5624
PAT	2851	3786	4289	4251	4939
EPS (Rs)	29	39	44	44	51
EPS growth (%)	-6%	32%	13%	1%	16%
ROE (%)	-6%	32%	13%	1%	16%
ROCE (%)	17%	16%	22%	20%	22%
BV	169	192	206	221	238
P/B (X)	2.7	3.3	3.8	2.9	2.7
P/E (x)	15.7	16.5	17.8	14.5	12.5

The views expressed above accurately reflect the personal views of the authors about the subject companies and its(their) securities. The authors have not and will not receive any compensation for providing a specific recommendation or view. Narnolia Financial Advisors Ltd. does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

1QFY20 Results

Soft quarter

Financials	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	YoY %	QoQ%	FY18	FY19	Fig in Rs cr
										YoY %
Net Sales	8,276	8,630	8,944	8,892	8,653	4.6%	-2.7%	30,773	34,742	12.9%
Other Income	111	175	81	167	341	206.3%	104.2%	1,417	534	-62.3%
Employee Exp	4,379	4,303	4,518	4,307	4,501	2.8%	4.5%	16,624	17,508	5.3%
Other Expenses	2,540	2,708	2,703	2,947	2,838	11.7%	-3.7%	9,439	10,897	15.4%
EBITDA	1,357	1,619	1,723	1,639	1,314	-3.2%	-19.8%	4710	6337	34.6%
Depreciation	281	294	284	270	321	14.4%	18.8%	1,085	1,129	4.1%
EBIT	1,076	1,324	1,439	1,368	993	-7.7%	-27.4%	3,625	5,208	43.7%
Interest	31	39	36	28	45	49%	62%	162	133	-18.0%
PBT	1,157	1,461	1,484	1,507	1,289	11.4%	-14.5%	4,879	5,609	15.0%
Tax	246	391	264	354	332	35.0%	-6.1%	1,093	1,254	14.8%
PAT	899	1,056	1,207	1,127	949	5.5%	-15.8%	3,786	4,289	13.3%

1QFY20 performance: Seasonality impacted the revenue growth

- ❑ Company's 1QFY20 revenue came in at USD1247.1million; a decline of 1.7%QoQ mainly impacted by seasonality in Comivia .In constant currency term, revenue declined 2.3%QoQ.
- ❑ In rupee term, revenue stood at Rs 8653 crore, a de- growth of 2.7%QoQ.Cross currency headwind during the quarter was 60bps.
- ❑ Telecom declined 3.2%QoQ impacted by comivia .Ex comivia, telecom remained flat after three consecutive quarter of growth. Enterprise segment remain marginally muted owing to weakness in segments like manufacturing and BFSI.
- ❑ Digital continued to remain strong by growing 3.8%QoQ and 37.4% YoY during the quarter. It now contributes 36% of the overall revenue.

Softness seen across major verticals

Segmental (USD mn)	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	QoQ%	YoY%
Communication	517	518	485	506	518	541	525	-3.0%	8.3%
Manufacturing	231	240	246	245	258	256	242	-5.5%	-1.7%
Technology,media	79	91	88	89	88	95	95	-0.3%	7.5%
BFSI	161	162	166	164	169	166	160	-3.9%	-4.1%
Retail,transport	86	77	75	79	84	81	77	-4.7%	3.5%
Others	137	157	164	136	142	129	148	14.8%	-9.5%

Softness remained in Europe while muted growth seen in America region

Geography(USD Mn)	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	QoQ%	YoY%
Americas	567	581	590	573	598	589	594	0.8%	0.6%
Europe	360	371	367	361	364	363	344	-5.2%	-6.3%
ROW	282	287	268	285	299	316	309	-2.1%	15.4%

- ❑ Industry wise, Softness was across all major segments. Telecom declined by 3.2%QoQ during the quarter while enterprise remained muted by declining 0.8%QoQ.Barring others (includes healthcare, life science and public-sector) which grew 14.8%QoQ, all the other segments in enterprise reported a decline. Retail declined 4.7%QoQ due to seasonality, BFSI declined 3.9%QoQ and continued decline was seen in manufacturing segment (declined 5.5%QoQ)
- ❑ Geography wise, America reported a muted growth of 0.2%QoQ in 1QFY20 While Europe and Row declined 5.2%/ 2.1%QoQ.

Wage hike washed the overall margin

- ❑ EBITDA for the quarter stood at Rs 1314crore , a decline of 3.2%QoQ.Gross margin declined 430bps to 28.8% while SG&A expenses deteriorated 110 bps to 14.7% , thus leading to contraction in EBITDA margin by 324 bps to 15.2%.
- ❑ Margin for 4QFY19 stood at 15.2% (390 bps decline) mainly owing to 1) impact by portfolio company(more than 100bps);2)salary hike(further 100bps);3)Dip in utilization(60bps);4)one time H1 visa cost(40-45bps);5) currency impacted 40bps ;6)Deal transition and some of the expenses incurred further impacted the margins by 20-30
- ❑ Other income came in at Rs341 crore higher than our estimates primarily driven by foreign exchange gain of 102crore (vs.25crore last quarter) and higher interest, Dividend & Misc. income during the quarter.
- ❑ PAT for the quarter stood at Rs 949 crore, a decline of 15.8%QoQ due to margin and revenue miss.

Weakness seen across top client buckets

Client (USD Mn)	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20	QoQ%	YoY%
Top 5 clients	281	289	268	284	285	289	267	-7.8%	-0.5%
Top 6-10 clients	402	407	398	399	398	406	383	-5.7%	-3.8%
Top 11-20 clients	544	569	566	556	555	572	544	-5.0%	-3.9%

Concall Highlights

- **Deal win:** 1QFY20 marked with strong deal momentum much better than witnessed last year. TCV deal wins during the quarter was worth close to half a billion USD (USD475mn) across Enterprise and Communications. Higher TCV in enterprise was seen for the quarter .Also the company is in final stage of recognition in some of its large deals.
- **Digital business:** Digital continued to remain strong by growing 3.9%QoQ and 37.4% YoY during the quarter. It now contributes 36% of the overall revenue. Digital is continuing to be major founder stone for the company's growth .The company is getting a very fair pipeline regarding digital transformation.
- **Acquisition:** the company announced an acquisition of digital company Mad*Pow acquisition based in US. The company has around 70 employees with capability in digital experience , human centre design and understanding of behavioral science which will give company significant edge in digital transformation projects that it is working on .
- **Subcon Cost:** The Company saw higher subcontracting cost during the quarter mainly due to HCI which has short term contracting which company take on board, many of this are quick ramp up deal thus require short term employees. The other reason for increase is certain revenue stream especially in TME vertical, the company had increase in subcontracting cost which is because of nature of work done in that segment.
- **Vertical performance**
 - **Communication:** the vertical recorded a de growth of 3.2%QoQ mainly impacted by seasonality in comivia business. Excluding comivia, communication vertical remained flat in constant currency basis due to timing issue.. While new deals have ramped up but traditional business is not growing. Going ahead, the pipeline looks robust for the FY20 so softness in 1QFY20 was predictable one and expects to improve from 2QFY20. Network transformation services are also being cross sell to enterprise customers. Also sees good traction from 5G and expects network to become bigger as world adopt 5G.
 - **Enterprise:** Enterprise segment posted marginal decline due to sluggishness in businesses owing to Auto and BFSI customer. Healthcare shown a sharp revive .Hi-tech continued to shown good growth momentum. Going forward, the company is seeing slow down in auto segment (Impact of EV market from China) and also seeing some sort of slowdown in Europe.
- **BPS Business:** the company BPS business continues to grow and add employees to the business. The company continues to expand its global footprint.
- **Margin performance in 1QFY20:**The company posted a margin contracted of 390bps owing to 1) impact by portfolio company(more than 100bps);2)salary hike(further 100bps);3)Dip in utilization(60bps);4)one time H1 visa cost(40-45bps);5) currency impacted 40bps ;6)Deal transition and some of the expenses incurred further impacted the margins by 20-30 bps.INDAS116 lease change impacted EBITDA by 60bps.
- **Margins for FY20:** the company expects wage hike and visa cost to recoup during the year. However currency fluctuation, transition costs, investment in people and Utilization play as headwinds in coming quarter. In medium term, the company sees 13% margin as doable.
- **Outlook for FY20:** While the company sees multiple headwinds in margins, the company expects to be on recovery journey as the company move forward. The company feels the funnel and late stage deals had one of strong period ever and that gives confidence of revenue growth coming back in future. The company is seeing communication growth higher than last year and enterprise growth to be in and around mid single digit for the year. The company sees H2 to stronger than H1.

Exhibit: Telecom Segment

Seasonality impacted the telecom growth

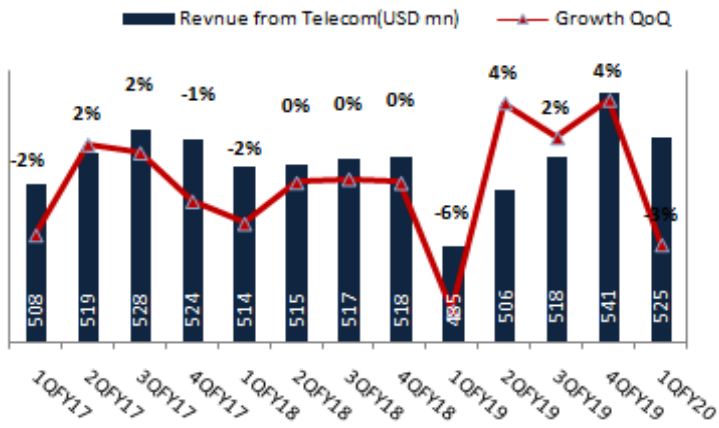


Exhibit: Enterprise Segment

Retail and BFSI washed away the overall enterprise revenue .

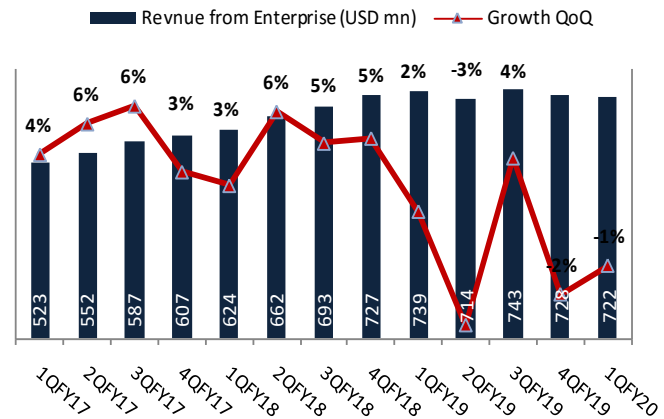


Exhibit: Margin Trend

Higher SG&A and wage hike pull down the 1QFY20 margins.

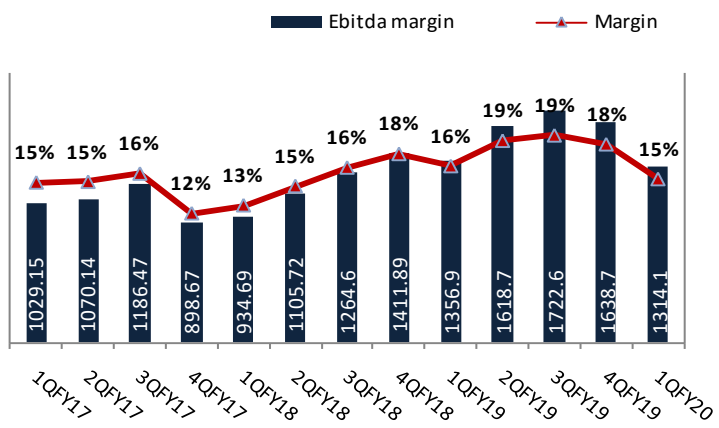


Exhibit: Utilization trend

Utilization declined further in 1QFY20 after achieving its all time high range

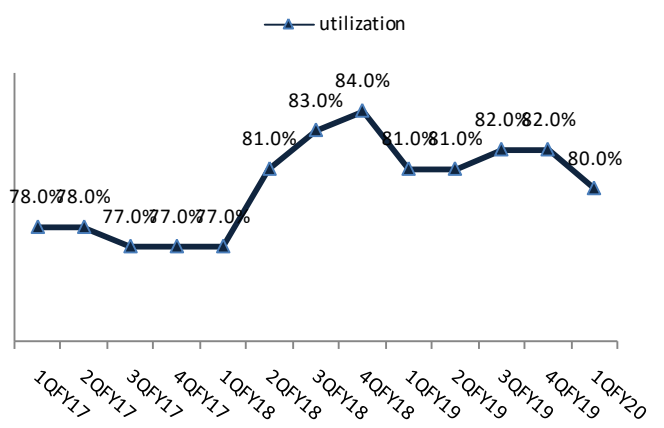
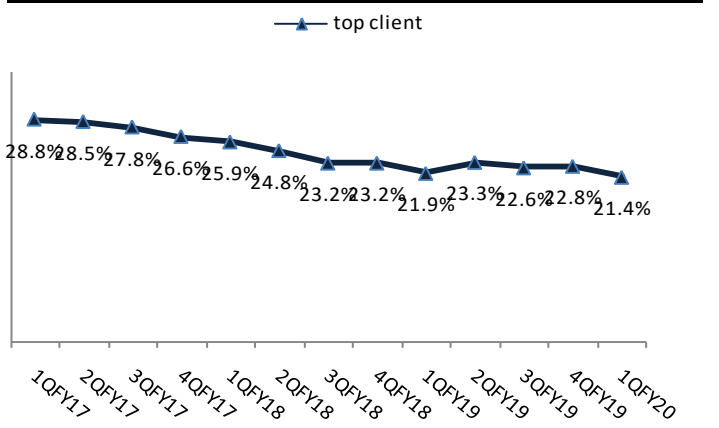


Exhibit: Top Client contribution

Weakness seen in top client revenue.



Operational Details

By Geography (%)	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
North America	45%	47%	47%	48%	47%	47%	46%	48%
Europe	30%	30%	30%	30%	30%	29%	29%	28%
Rest of the World	25%	23%	23%	22%	23%	24%	25%	25%

Vertical %	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
Communication(telecom)	44%	43%	42%	40%	42%	41%	43%	42%
Manufacturing	19%	19%	19%	20%	20%	21%	20%	19%
TMT	6%	7%	7%	7%	7%	7%	8%	8%
BFS	14%	13%	13%	14%	14%	13%	13%	13%
Retail, transport & logistics	7%	7%	6%	6%	7%	7%	6%	6%
Others	10%	11%	13%	13%	11%	11%	10%	12%

Onsite/Offshore%	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
Onsite	64%	66%	67%	67%	65%	66%	65%	65%
Offshore	36%	34%	33%	33%	36%	35%	35%	35%

Total Headcount	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
Software professionals	75587	73460	72437	72462	72534	71785	71477	74093
BPO professionals	35287	35496	34190	34700	39407	43439	43081	45000
Sales & support	6351	6285	6180	6390	6450	6618	6524	6680
IT Attrition % (LTM)	16%	17%	18%	19%	20%	21%	21%	21%
IT Utilization %	81%	83%	84%	81%	81%	82%	82%	80%
IT Utilization % (ExTrainee)	81%	83%	84%	84%	83%	83%	82%	82%

Active Clients	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
No. of Active Clients	885	903	913	926	930	935	938	941
% of Repeat Business	95%	93%	88%	99%	97%	95%	89%	98%

No. of Million \$ Clients	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
≥ \$1 million clients	390	389	392	396	407	416	425	429
≥ \$5 million clients	147	154	156	154	157	157	156	160
≥ \$10 million clients	81	83	85	86	86	88	83	81
≥ \$20 million clients	40	40	44	47	45	46	50	49
≥ \$50 million clients	14	16	16	16	16	18	20	21

Clients	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
Top 5	25%	23%	23%	22%	23%	23%	23%	21%
Top 10	35%	33%	33%	33%	33%	32%	32%	31%
Top 20	46%	45%	46%	46%	46%	44%	45%	44%

Capex	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
Capital Expenditure	454.8	167.4	209.3	186.8	150.7	224.5	205	204.4

Hedge book	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	4QFY19	1QFY20
GBP IN MN	260	241	229	213	190	171	233	275
STRIKE RATE(INR)	95.4	94.2	94.4	95.1	97	98.5	99.7	99.1
USD IN MN	646	577	598	894	1069	1084	934	961
STRIKE RATE(INR)	72.2	72.2	71	70.7	71.9	72.8	72.9	73.5
EURO IN MN	256	236	244	228	220	202	293	361
STRIKE RATE(INR)	84.1	82.1	85.4	85.9	87.4	88.6	88.8	88.2

Financial Details

Balance Sheet

Fig in Rs cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
Share Capital	234	480	436	439	442	444	433	433
Reserves	8,947	11,768	14,155	15,998	18,401	19,841	20,798	22,444
Networth	9,181	12,249	14,591	16,437	18,843	20,284	21,232	22,877
Debt	52	675	1,002	1,220	1,726	1,405	1,405	1,405
Other Non Current Liab	790	454	678	1,157	1,167	914	914	914
Total Capital Employed	11,398	14,768	17,695	20,508	23,475	24,311	25,258	26,904
Net Fixed Assets (incl CWIP)	2,297	2,872	3,106	4,104	4,899	4,350	3,635	2,987
Non Current Investments	1,219	1,299	118	231	1,246	716	716	716
Other Non Cur Asst	21	31	537	646	602	554	554	554
Non Current Assets	4,157	6,266	6,884	8,863	10,482	10,612	9,896	9,248
Debtors	4,349	5,206	5,771	5,338	6,498	6,959	7,205	7,905
Cash & Bank	3,315	2,405	4,018	3,219	3,044	2,359	2,046	2,876
Other Curr Assets	2,616	3,813	2,446	3,361	2,112	2,387	2,701	2,701
Current investments	253	804	1,125	2,165	3,445	6,590	8,386	9,339
current financial asset	-	-	1,587	2,157	2,942	2,906	2,906	2,906
current tax asset	10	25	40	61	66	75	78	85
Short-term loans and advances	10,542	12,253	14,986	16,300	18,107	21,276	23,321	25,813
Current Assets	1,472	2,059	2,276	2,312	2,037	2,489	2,577	2,828
Trade payables	1,267	1,799	355	387	403	396	409	449
Provisions	1,802	1,223	1,238	1,612	1,707	1,761	1,823	2,000
Other Curr Liab	-	-	270	423	1,877	3,473	3,473	3,473
Other financial liability	-	-	692	825	938	1,018	1,018	1,018
Curr Liabilities	4,542	5,080	4,830	5,559	6,962	9,136	9,299	9,767
Net Current Assets	6,000	7,173	10,156	10,768	11,145	12,430	14,093	16,386
Total Assets	15,940	19,848	22,525	26,067	30,437	33,447	34,557	36,670.87

Income Statement

Fig in Rs cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
Revenue from Operation	18,831	22,621	26,494	29,141	30,773	34,742	35,970	39,469
Change (%)	174%	20%	17%	10%	6%	13%	4%	10%
EBITDA	4,184	4,153	4,271	4,184	4,710	6,337	6,186	6,892
Change (%)	194%	-1%	3%	-2%	13%	35%	-2%	11%
Margin (%)	22%	18%	16%	14%	15%	18%	17%	17%
Depr & Amor.	522	611	759	978	1,085	1,129	1,282	1,267
EBIT	3,662	3,542	3,512	3,206	3,625	5,208	4,904	5,624
Int. & other fin. Cost	80	30	97	129	162	133	182	182
Other Income	113	107	439	778	1,417	534	979	1,184
EBT	3,662	3,542	3,512	3,206	3,625	5,208	4,904	5,624
Exp Item	(120)	-	-	-	-	-	-	-
Tax	752	960	830	1,002	1,093	1,254	1,419	1,657
Minority Int & P/L share of Ass.	(34)	(31)	-	-	-	-	-	-
Reported PAT	3,062	2,659	3,024	2,853	3,786	4,354	4,282	4,970
Adjusted PAT	3,029	2,628	3,027	2,851	3,786	4,289	4,251	4,939
Change (%)	283%	-13%	15%	-6%	33%	13%	-1%	16%
Margin(%)	16%	12%	11%	10%	12%	12%	12%	13%

Financial Details

Key Ratios

Fig in Rs cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
ROE	41%	25%	23%	18%	21%	22%	20%	22%
ROCE	40%	27%	22%	17%	16%	22%	20%	22%
Asset Turnover	12	9	9	8	7	8	9	12
Current Ratio	2	2	3.1	2.9	2.6	2.4	2.5	2.7
Debtor Days	84	84	79	67	77	73	73	73
Book Value Per Share	197	127	151	169	192	206	221	238
Payable Days	29	33	31	29	24	26	26	26
Earnings Per Share	65	27	31	29	39	44	44	51
P/E	14	23	15	16	17	18	14	12
Price / Book Value	5	5	3	3	3	4	3	3
EV/EBITDA	9	14	10	11	13	12	10	9
EV/Sales	2	3	2	2	2	2	2	2

Cash Flow Statement

Fig in Rs cr

Y/E March	FY14	FY15	FY16	FY17	FY18	FY19	FY20E	FY21E
PBT	3,695	3,618	3,857	3,853	4,879	5,543	5,701	6,627
(inc)/Dec in Working Capital	(1,615)	(850)	(461)	544	(783)	(1,057)	(180)	(510)
Non Cash Op Exp	610	713	1,057	754	984	1,607	1,282	1,267
Int Paid (+)	-	-	-	-	-	-	-	-
Tax Paid	(1,094)	(1,073)	(1,315)	(1,080)	(1,526)	(1,661)	(1,419)	(1,657)
others	-	-	-	-	-	-	-	-
CF from Op. Activities	1,596	2,409	3,137	4,071	3,554	4,432	5,384	5,727
(inc)/Dec in FA & CWIP	(914)	(1,113)	(871)	(760)	(790)	(779)	(566)	(620)
Free Cashflow	682	1,296	2,266	3,311	2,763	3,653	4,817	5,108
(Pur)/Sale of Inv	(62)	(447)	(278)	(912)	-	-	(1,796)	(953)
CF from Inv. Activities	(190)	(2,092)	(1,460)	(3,051)	(3,360)	(2,116)	(2,362)	(1,573)
inc/(dec) in NW	50	58	36	35	25	36	(10)	-
inc/(dec) in Debt	852	802	138	(14)	960	215	-	-
Int. Paid	(97)	(64)	(93)	(111)	(160)	(135)	-	-
Div Paid (inc tax)	(136)	(550)	(555)	(1,239)	(944)	(1,491)	(1,348)	(1,348)
others	(1,738)	(1,101)	(115)	(352)	(311)	(801)	-	-
CF from Fin. Activities	(972)	(790)	(496)	(1,571)	(269)	(2,251)	(3,334)	(3,324)
Inc(Dec) in Cash	434	(473)	1,181	(550)	(76)	64	(313)	831
Add: Opening Balance	1,018	1,679	1,213	2,555	2,042	1,966	2,043	1,730
Closing Balance	1,452	1,206	2,394	2,005	1,966	2,043	1,730	2,560

Narnolia Financial Advisors Ltd. is a SEBI registered Research Analyst having SEBI Registration No. INH300006500. The Company/Analyst (s) does/do not have any holding in the stocks discussed but these stocks may have been recommended to clients in the past. Clients of Narnolia Financial Advisors Ltd. may be holding aforesaid stocks.

The stocks recommended are based on our analysis which is based on information obtained from public sources and sources believed to be reliable, but no independent verification has been made nor is its accuracy or completeness guaranteed.

Disclosures: Narnolia Financial Advisors Ltd. (NFAL) (Formerly Microsec Capital Ltd.) is a SEBI Registered Research Analyst having registration no. INH300006500. NFAL is engaged in the business of providing Stock Broking, Depository Participant, Merchant Banking, Portfolio Management & distribution of various financial products. Details of associate entities of NFAL is available on the website at www.narnolia.com

No penalties have been levied on NFAL by any Regulatory/Statutory authority. NFAL, its associates, Research Analyst or their relative may have financial interest in the subject company. NFAL and/or its associates and/or Research Analyst may have beneficial ownership of 1% or more securities in the subject company at the end of the month immediately preceding the date of publication of the Research Report. NFAL and its associate company(ies), their directors and Research Analyst and their relatives may; (a) from time to time, have a long or short position in, act as principal in, and buy or sell the securities or derivatives thereof of companies mentioned herein. (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 company(ies) discussed herein or act as an advisor or lender/borrower to such company(ies) or may have any other potential conflict of interests with respect to any recommendation and other related information and opinions; however the same shall have no bearing whatsoever on the specific recommendations made by the analyst(s), as the recommendations made by the analyst(s) are completely independent of the views of the associates of NFAL even though there might exist an inherent conflict of interest in some of the stocks mentioned in the research report. Research Analyst may have served as director/officer, etc. in the subject company in the last 12 month period. NFAL and/or its associates may have received compensation from the subject company in the past 12 months. In the last 12 months period ending on the last day of the month immediately preceding the date of publication of this research report, NFAL or any of its associates may have: a) managed or co-managed public offering of securities from subject company of this research report, b) received compensation for investment banking or merchant banking or brokerage services from subject company of this research report, c) received compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company of this research report. d) Subject Company may have been a client of NFAL or its associates during 12 months preceding the date of distribution of the research report. NFAL and its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. NFAL and / or its affiliates may do and seek to do business including Investment Banking with companies covered in the research reports. As a result, the recipients of this report should be aware that NFAL may have a potential conflict of interest that may affect the objectivity of this report. Compensation of Research Analysts is not based on any specific Merchant Banking, Investment Banking or Brokerage service transactions. Research Analyst's views on Subject Company may vary based on Fundamental research and Technical Research. Proprietary trading desk of NFAL or its associates maintains arm's length distance with Research Team as all the activities are segregated from NFAL research activity and therefore it can have an independent view with regards to subject company for which Research Team have expressed their views.

Analyst Certification The views expressed in this research report accurately reflect the personal views of the analyst(s) about the subject securities or issues, and no part of the compensation of the research analyst(s) was, is, or will be directly or indirectly related to the specific recommendations and views expressed by research analyst(s) in this report.

Disclosure of Interest Statement-

Analyst's ownership of the stocks mentioned in the Report	NIL
---	-----

A graph of daily closing prices of securities is available at www.nseindia.com, www.bseindia.com.

Correspondence Office Address: Arch Waterfront, 5th Floor, Block GP, Saltlake, Sector 5, Kolkata 700 091; Tel No.: 033-40541700; www.narnolia.com.

Registered Office Address: Marble Arch, Office 201, 2nd Floor, 236B, AIC Bose Road, Kolkata 700 020; Tel No.: 033-4050 1500; www.narnolia.com

Compliance Officer: Manish Kr Agarwal, Email Id: mkagarwal@narnolia.com, Contact No.:033-40541700.

Registration details of Company: Narnolia Financial Advisors Ltd. (NFAL): SEBI Stock Broker Registration: INZ000166737 (NSE/BSE/MSEI); NSDL/CDSL: IN-DP-380-2018; Research Analyst: INH300006500, Merchant Banking: (Registration No.: INM000010791), PMS: (Registration No.: INP000002304), AMFI Registered Mutual Fund distributor: ARN 3087

Registration Details of Group entities: G. Raj & Company Consultants Ltd (G RAJ)-BSE Broker INZ260010731; NSDL DP: IN-DP-NSDL-371-2014 || Narnolia Commerze Limited (Formerly Microsec Commerze Ltd.)-MCX/NCDEX Commodities Broker: INZ000051636 || NarnoliaVeloX Advisory Ltd.- SEBI Registered PMS: INP000005109 || Eastwind Capital Advisors Pvt Ltd. (EASTWIND)-SEBI Registered Investment Adviser: INA300005439 || Narnolia Insurance Brokers Limited (Formerly Microsec Insurance Brokers Ltd.)-IRDA Licensed Direct Insurance Broker (Life & Non-Life) Certificate No. 134, License No. DB046/02 || Narnolia Securities Ltd. (NSL)-AMFI Registered Mutual Fund distributor: ARN 20558, PFRDA NPS POP: 27092018 || Narnolia Capital Advisors Pvt. Ltd. - RBI Registered NBFC:B.05.02568.

Disclaimer:

This report has been prepared by Narnolia Financial Advisors Ltd. (NFAL) and is meant for sole use by the recipient and not for public circulation. The report and information contained herein is strictly confidential and may not be altered in any way, transmitted to, copied or distributed, in part or in whole, to any other person or to the media or reproduced in any form, without prior written consent of NFAL. The report is based on the facts, figures and information that are considered true, correct, reliable and accurate. The intent of this report is not recommendatory in nature. The information is obtained from publicly available media or other sources believed to be reliable. Such information has not been independently verified and no guaranty, representation of warranty, express or implied, is made as to its accuracy, completeness or correctness. All such information and opinions are subject to change without notice. The report is prepared solely for informational purpose and does not constitute an offer document or solicitation of offer to buy or sell or subscribe for securities or other financial instruments for the clients. Nothing in this report constitutes investment, legal, accounting and tax advice or a representation that any investment or strategy is suitable or appropriate to your specific circumstances. The securities discussed and opinions expressed in this report may not be suitable for all investors, who must make their own investment decisions, based on their own investment objectives, financial positions and needs of specific recipient. Certain transactions -including those involving futures, options, another derivative products as well as non-investment grade securities - involve substantial risk and are not suitable for all investors. Each recipient of this document should make such investigations as it deems necessary to arrive at an independent evaluation of an investment in the securities of companies referred to in this document (including the merits and risks involved), and should consult his/her/its own advisors to determine the merits and risks of such an investment. Though disseminated to all the customers simultaneously, not all customers may receive this report at the same time. NFAL will not treat recipients as customers by virtue of their receiving this report. Neither the Company, nor its directors, employees, agents or representatives shall be liable for any damages whether direct or indirect, incidental, special or consequential including lost revenue or lost profits or lost opportunities that may arise from or in connection with the use of the information/report. The person accessing this information specifically agrees to exempt NFAL or any of its affiliates or employees from, any and all responsibility/liability arising from such misuse and agrees not to hold NFAL or any of its affiliates or employees responsible for any such misuse and further agrees to hold NFAL or any of its affiliates or employees free and harmless from all losses, costs, damages, expenses that may be suffered by the person accessing this information due to any errors and delays.

This report is not directed or intended for distribution to or use by any person or entity resident in a state, country or any jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject NFAL & its group companies to registration or licensing requirements within such jurisdictions.