PERSISTENT SYSTEMS LTD.



Industry IT
Bloomberg PSYS IN
BSE CODE 533179

New strategy to accelerate growth in coming years; Aggressive hiring to hold margin at 17% level

3QFY19 Result Update

- □ Company reported a mixed set of number in 3QFY19 where revenue stood at USD 121 million (in line with our estimates) where PAT came at Rs 91.7 crore, a growth 3.9%QoQ (below our estimates of 97.5crore) mainly impacted by forex loss
- ☐ The revenue during the quarter remained soft and grew 2.2%QoQ due to IBM and reseller business which grew lower than anticipated (grew 1.9%QoQ in strong quarter).
- ☐ The digital business which was posting a subdued performance in last few quarters have finally started to accelerate and grew 6.5% sequentially .25 new customers were added during the quarter with several were from mark new logos.
- □ EBITDA for the quarter stood at Rs 146.3crore (including the adjustment of 24 crore related to exchange loss), a growth 1.8%QoQ. Margin excluding the exchange loss expanded 250 bps mainly led by currency benefit (50 bps), stable SG&A cost and higher utilization which improved from 81.9 to 82.1% in 3QFY19. However some portion was offset by the higher provision due to couple of receivable account crossing 180 days, Thus impacted the margins by Rs10 million.
- □ Under capital allocation policy, the compared declared interim dividend of Rs 8 per share as well as declared a buyback of Rs 225 crore (10% of net worth)at a price not exceeding Rs 750 through open market route.

View and Valuation

9MFY19 seemed to be not so good year as the company has faced lot of challenges related to execution, subdued growth in digital business and softness in IP business. However the new strategy which mainly focuses on three verticals (BFS, Healthcare and Manufacturing) and four technologies (AI/ML/Data, Cloud, IoT, Security) is expected to transforms the growth going ahead. Also the deal wins which we saw in 3QFY19 mainly in BFS and Hi-tech reflects that strategy is going in the right direction. The digital business which was posting a subdued growth in last few quarters has started to accelerate and grew 6.5%QoQ in 3QFY19. Though the digital business is still away from its 30%YoY growth that it used to post few quarters back, however with the new client addition (25 new logo added) in digital the management expects it to come back to its desired level of 25% to 30 % YoY growth in future. Also the IP led revenue which grew lower than anticipated in 3QFY19 is expected to improve in FY20 led by bounce back of growth in reseller business and continued momentum in IBM lot business.On margin front, we have reduced our FY19 margin by 50bps whereas FY20 margin remained unchanged post result. The management expects to maintain the margin at current level for FY20 using the leverage like increasing its offshore mix and demand higher rate in partnership business however some portion is expected to mitigated by aggressively hiring plan to meet the supply constraints. Thus we expect Persistent to post revenue growth of 13% CAGR over FY18 to FY20E. The stock is recently trading at attractive valuation thus we value the stock at Rs 703(14x FY20EPS) and maintain BUY.

Key Risks to our rating and target

☐ Slow momentum in Digital segment which is a key driver of growth.

KEY FINANCIAL/VALUATIONS	FY16	FY17	FY18	FY19E	FY20E
Net Sales	2312	2878	3034	3404	3856
EBITDA	414	465	469	576	660
EBIT	317	316	310	415	477
PAT	297	302	323	358	402
EPS (Rs)	37	38	40	45	50
EPS growth (%)	2%	1%	7%	11%	12%
ROE (%)	20%	17%	16%	16%	16%
ROCE (%)	21%	18%	15%	18%	19%
BV	207	237	266	297	333
P/B (X)	4	3	3	2	2
P/E (x)	20	16	18	13	11

RATING BUY

CMP 565

Price Target 703

Potential Upside 24%



Stock Info

52wk Range H/L	533/915
Mkt Capital (Rs Cr)	4517
Free float (%)	69%
Avg. Vol 1M (,000)	262
No. of Shares (Cr)	8
Promoters Pledged (Cr)	0

Research Analyst
Niharika Ojha

niharika@narnolia.com +91-22-62701230

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.

3QFY19 Results

Mixed performance

Financials	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	YoY %	QoQ%	FY17	FY18	YoY %
Net Sales /	792	753	834	836	864	9.1%	3.4%	2,878	3,034	5.4%
Other Income	19	32	19	23	23	19%	-1%	96	119	24.3%
Employee	479	448	462	486	491	2.5%	1.0%	1,801	1,832	1.7%
Other Expenses	176	196	232	206	227	29.3%	10.4%	612	733	19.8%
EBITDA	138	108	140	144	146	6.4%	1.8%	465	469	0.7%
Dep and	39	42	40	40	40	1.0%	-0.5%	149	158	6.4%
EBIT	98	66	100	104	107	8.6%	2.7%	316	310	-1.9%
Interest	0	-	0	0	0	378.6%	-37.4%	-	0	
PROFIT BEFORE	117	99	119	127	130	10.3%	2.0%	412	429	4.1%
Tax	26	25	31	39	38	46.5%	-2.3%	99	106	7.0%
Exceptional	-	-	-	-	-			11	-	
PROFIT AFTER	92	74	88	88	92	0.1%	3.9%	302	323	7.1%

Revenue in line with expectation

Persistent 3QFY19 revenue grew 2.2% in USD term in its seasonally strong quarter. In rupee term, revenue stood at Rs 864 crore, a growth of 3.4% QoQ mainly impacted by lower than expected growth in IBM lot and reseller business. The linear revenue grew by 3.1% while the IP revenue came in lower with a dip of 0.3%QoQ.

Moderate growth in digital after sharp decline in 2QFY19

SERVICE(USD Mn)	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	QoQ%	YoY %
Services	50	52	51	53	51	51	51	-0.4%	-1.4%
Digital	20	25	27	28	26	26	28	6.4%	2.7%
Alliance	33	32	36	28	40	35	36	1.9%	-2.0%
Accelerite	9	10	8	7	6	7	7	7.8%	-12.0%

Services (42% of revenue, includes ISVs except IBM) was flattish with -0.4% QoQ change. Alliance segment (revenues from IBM, 29.4% of revenue) saw a slow of 1.9% QoQ in its seasonally strong quarter while Accelerite (5.8% of business) accelerated by 7.8% QoQ. Digital (22% of revenue) led the growth by growing 6.5%QoQ mainly led by large deal wins during the quarter.

Muted performance in IP revenue

Industry Wise(USD Mn)	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19	QoQ%	YoY %
ISV	46	47	47	47	48	47	48	3.2%	1.9%
Enterprise	36	40	43	43	42	41	43	3.3%	0.0%
IP Led	31	31	33	26	34	30	30	0.0%	-8.1%

ISV revenues (39.8% of business) continued to improve in 3QFY19 and grew 3.2% QoQ after a sluggish growth in previous quarter. Enterprise segment was (35.2% of business), increased by 3.3% QoQ as against marginal decline in the previous quarters. IP revenue (25% of business) remained muted during the quarters.

Operational efficiency led to margin beat

- □ EBITDA for the quarter stood at Rs 146.3crore (including the adjustment of 24 crore related to exchange loss), a growth 1.8%QoQ. Gross margin came in higher at 38.2% versus 35.3% in the previous quarter.
- ☐ Margin excluding the exchange loss beat estimates and expanded 250 bps to 19.7% as compared to 17.2% last quarter mainly led currency benefit (50 bps), stable SG&A cost and higher utilization which improved from 81.9 to 82.1% in 3QFY19. However some portion was offset by the higher provision due to couple of receivable account crossing 180 days, impacted the margins by Rs10 million . Onsite utilization was improved marginally 30bp QoQ to 83.9%, while offshore utilization increased by 20bp QoQ to 81.8%. Other income (excluding forex gain) during the quarter stood at Rs23crore.
- □ PAT for the quarter stood at Rs91.7 crore, a growth of 3.9% mainly led by higher other income and margin beat.

Buyback announced with 3QFY19 result

Under capital allocation policy, the compared declared interim dividend of Rs 8 per share as well as declared a buyback of Rs 225 crore (10% of net worth)at a price not exceeding Rs 750 through open market route. The number of shares to be bought back would be 3,000,000 which are 3.75% of the total number of paid-up Equity Shares of the Company.

Concall Highlights

- Margin performance in 3QFY19: Margin expanded 250 bps to 19.7% (excluding the adjustment done related to 24 crore exchange loss) mainly led by favorable impact due to currency 50bps, selling& marketing and G&A expenses being stable, improvement in utilization however some portion was offset by doubtful debt provision which was higher by Rs 10 million due to couple of receivable account crossing 180 days, however the management expects to realize in next quarter. The management expects steady margins going ahead however will continue with aggressive hiring next quarter too.
- ➤ Digital business now gearing up: The digital business which was posting a subdued performance in last few quarters, have finally started to accelerate and grew 6.5% sequentially as compared to 5.6% last quarter.25 new customers were added during the quarter with several are from mark new logos. The management expects the growth in digital to continue led by the current pipeline, new customers and digital project added in existing customers going ahead.
- > Strong wins during the quarter: The Company saw strong wins in its focus verticals like financial service and hi-tech business. These included a transformative platform deal with leader in analytic, a major digital initiative with global 500 financial powerhouse in insurance and investment banking, cloud management and cloud migration for another large client for another large financial and insurance company and finally won a deal to revamp the cash management system for investment bank .The management sees the momentum of deal wins to continue going ahead.
- ➤ IL&FS Exposure: Persistent Systems Limited had deposits of Rs 43 crore with the financial institutions through IL&FS. These are due for maturity from January 2019 to June 2019, the first deposit being due on 28th January 2019. As of December 31, 2018, there have been no defaults in payment of interest on the aforesaid deposits. At this stage, management finds it difficult to estimate the ultimate probable loss if any but the management believes that there is no immediate need to recognize any impairment on the above deposits as of December 31, 2018. The Company will continue to monitor the developments in this matter for the purpose of determining the financial reporting impact, if any.
- ➤ No concern related HCL acquiring the IBM product: The Company is not seeing any issue related to recent event where HCL brought platform from IBM with whom the company already have strong partnership. However, The Company is seeing no concern and expects positive opportunity coming in that direction.
- Finalizing of new CEO for the company: Persistent is in the final conversation to appoint the new CEO for the company and he is expected to be on board in next one two months. Mr despande will continue to remain as the chairman of the company.
- Margin expected to maintained going ahead: The parameter which will help to maintain the margins are: 1) partnership led businesses increasing which comes with higher rate.2)moving to offshore will benefit margins however aggressive hiring and limited room from utilization to impact margins in coming quarters.

Exhibit: Revenue trend

Softness in IBM lot impacted the revenue growth.

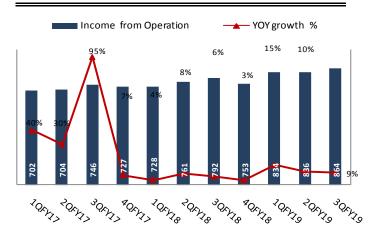


Exhibit: EBITDA margins

Exchange loss offset the operational efficiency and currency tailwind.

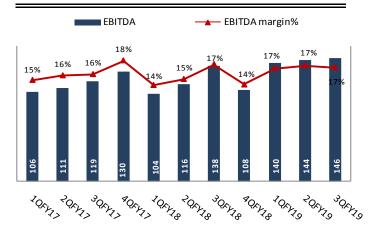


Exhibit: PAT and PAT margin

Higher income led to PAT growth, though still below our estimates.

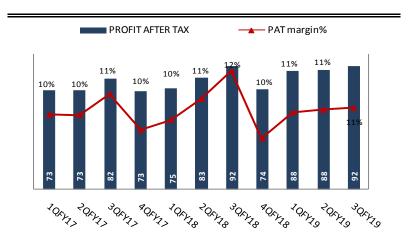


Exhibit: Digital revenue

Grew 6.5% sequentially after soft quarters.

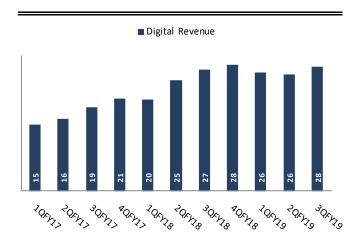
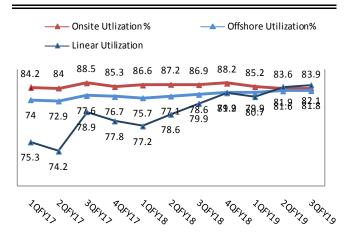


Exhibit: Utilization Rate

Utilization continues to grow (82.1% in 3QFY19 vs.81.9% in 2QFY19.



PERSISTENT

Operational Details

By Project Type (%)	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
North America	86.6%	86.5%	85.5%	83.4%	84.4%	80.9%	79.7%	82.6%	83.7%
Europe	5.3%	5.3%	5.9%	8.5%	7.3%	8.2%	12.0%	7.5%	7.6%
India	5.5%	5.6%	5.9%	5.6%	5.8%	7.9%	6.1%	7.3%	6.8%
ROW	2.6%	2.6%	2.7%	2.5%	2.5%	3.0%	2.2%	2.6%	1.9%
Revenue by Service(%)	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Services	43.9%	43.9%	44.5%	43.7%	41.9%	45.5%	41.5%	43.0%	41.9%
Digital	16.9%	18.9%	18.0%	20.9%	22.0%	24.0%	21.4%	22.0%	22.9%
Alliance	30.6%	27.6%	29.2%	27.3%	29.6%	24.3%	32.1%	29.5%	29.4%
Accelerite	8.6%	9.6%	8.3%	8.1%	6.5%	6.2%	5.0%	5.5%	5.8%
Revenue by Industry(%)	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
ISV	42.5%	42.0%	40.8%	39.9%	38.5%	40.6%	38.8%	39.5%	39.8%
Enterprise	29.1%	30.0%	32.0%	34.1%	34.7%	37.1%	33.8%	34.9%	35.2%
IP Led	28.4%	28.0%	27.2%	26.0%	26.8%	22.3%	27.4%	25.6%	25.0%
Client	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Top 1	30%	27%	28%	26%	28%	22%	24%	26%	26%
Top 5	46%	43%	46%	44%	46%	41%	44%	43%	45%
Top 10	55%	52%	55%	54%	55%	50%	54%	52%	55%
Large > \$ 3Mn	15	15	18	19	19	18	18	18	20
Medium > \$1Mn, < \$ 3Mn	50	55	52	49	51	53	58	56	56
Revenue Mix	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Onsite	26.7%	27.8%	29.9%	31.9%	32.1%	34.1%	31.1%	29.7%	29.9%
Offshore	44.9%	44.6%	42.9%	42.1%	41.1%	43.6%	41.5%	44.7%	45.1%
IP Led	28.4%	27.6%	27.2%	26.0%	26.8%	22.3%	27.4%	25.6%	25.0%
Yield	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
yield	50.2%	49.4%	49.7%	51.0%	53.6%	52.3%	55.0%	53.3%	53.9%
People Number	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Technical	8562	8808	8744	8599	8460	8329	8196	8566	8761
Sales & Business	200	193	210	208	206	211	237	247	266
Rest	467	459	447	439	443	436	469	489	503
Business offering	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Services	72%	72%	73%	74%	73%	78%	73%	74%	75%
IP Led	28%	28%	27%	26%	27%	22%	27%	26%	25%
Utilization	3QFY17	4QFY17	1QFY18	2QFY18	3QFY18	4QFY18	1QFY19	2QFY19	3QFY19
Linear Utilization(%)	78.9%	77.8%	77.2%	78.6%	79.9%	81.2%	80.7%	81.9%	82.1%
Onsite Utlization %	88.5%	85.3%	86.6%	87.2%	86.9%	88.2%	85.2%	83.6%	83.9%
Offshore Utilization%	77.6%	76.7%	75.7%	77.1%	78.6%	79.9%	79.9%	81.6%	81.8%

PERSISTENT

Financial Details

Balance Sheet

Y/E March	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E
Share Capital	40	40	80	80	80	80	80	80
Reserves	978	1,182	1,326	1,559	1,819	2,047	2,300	2,586
Networth	1,018	1,222	1,406	1,639	1,899	2,127	2,380	2,666
Debt	1	3	2	3	2	2	2	2
Other Non Cur Liab	64	39	12	13	28	43	43	43
Total Capital Employed	1,020	1,226	1,408	1,642	1,901	2,129	2,381	2,668
Net Fixed Assets (incl CWIP)	468	436	409	445	557	509	422	375
Non Cur Investments	17	82	212	135	234	288	288	288
Other Non Cur Asst	52	46	1	87	7	9	9	9
Non Curr Assets	507	478	456	571	701	599	512	464
Debtors	245	303	359	428	475	485	544	616
Cash & Bank	56	96	142	143	151	242	322	405
Other Curr Assets	43	90	104	179	86	156	175	199
Current investments	312	407	462	483	450	592	828	1,050
current tax asset	-	-	-	-	9	11	11	11
Short-term loans and advances	35	41	41	81	1	1	1	1
Curr Assets	691	937	1,106	1,314	1,404	1,763	2,157	2,558
Creditors	32	43	53	165	121	167	188	213
Provisons	105	121	176	122	139	160	179	203
Other Curr Liab	47	114	127	164	111	120	135	153
Other financial liability	-	-	-	-	45	40	40	40
Curr Liabilities	184	278	355	452	417	487	542	608
Net Curr Assets	507	658	751	861	987	1,276	1,615	1,949
Total Assets	1,267	1,543	1,775	2,107	2,346	2,659	2,966	3,319

Income Statement

FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E
1,295	1,669	1,891	2,312	2,878	3,034	3,404	3,856
29%	29%	13%	22%	24%	5%	12%	13%
313	414	390	414	465	469	576	660
39%	32%	-6%	6%	12%	1%	23%	15%
24%	25%	21%	18%	16%	15%	17%	17%
78	103	94	97	149	158	161	183
234	312	296	317	316	310	415	477
0	0	0	0	-	0	0	-
29	31	94	78	96	119	87	81
263	343	390	396	412	429	501	558
-	-	-	-	11	-	-	-
75	93	99	98	99	106	143	156
-	-	-	-	-	-	-	-
188	249	291	297	302	323	358	402
188	249	291	297	302	323	358	402
32%	33%	17%	2%	1%	7%	11%	12%
14%	15%	15%	13%	10%	11%	11%	10%
	1,295 29% 313 39% 24% 78 234 0 29 263 - 75 - 188 188 32%	1,295 1,669 29% 29% 313 414 39% 32% 24% 25% 78 103 234 312 0 0 29 31 263 343 - - 75 93 - - 188 249 188 249 32% 33%	1,295 1,669 1,891 29% 29% 13% 313 414 390 39% 32% -6% 24% 25% 21% 78 103 94 234 312 296 0 0 0 29 31 94 263 343 390 - - - 75 93 99 - - - 188 249 291 188 249 291 32% 33% 17%	1,295 1,669 1,891 2,312 29% 29% 13% 22% 313 414 390 414 39% 32% -6% 6% 24% 25% 21% 18% 78 103 94 97 234 312 296 317 0 0 0 0 29 31 94 78 263 343 390 396 - - - - 75 93 99 98 - - - - 188 249 291 297 188 249 291 297 32% 33% 17% 2%	1,295 1,669 1,891 2,312 2,878 29% 29% 13% 22% 24% 313 414 390 414 465 39% 32% -6% 6% 12% 24% 25% 21% 18% 16% 78 103 94 97 149 234 312 296 317 316 0 0 0 0 - 29 31 94 78 96 263 343 390 396 412 - - - - 11 75 93 99 98 99 - - - - - 188 249 291 297 302 188 249 291 297 302 32% 33% 17% 2% 1%	1,295 1,669 1,891 2,312 2,878 3,034 29% 29% 13% 22% 24% 5% 313 414 390 414 465 469 39% 32% -6% 6% 12% 1% 24% 25% 21% 18% 16% 15% 78 103 94 97 149 158 234 312 296 317 316 310 0 0 0 0 - 0 29 31 94 78 96 119 263 343 390 396 412 429 - - - - 11 - 75 93 99 98 99 106 - - - - - - 188 249 291 297 302 323 188 249	1,295 1,669 1,891 2,312 2,878 3,034 3,404 29% 29% 13% 22% 24% 5% 12% 313 414 390 414 465 469 576 39% 32% -6% 6% 12% 1% 23% 24% 25% 21% 18% 16% 15% 17% 78 103 94 97 149 158 161 234 312 296 317 316 310 415 0 0 0 0 - 0 0 29 31 94 78 96 119 87 263 343 390 396 412 429 501 - - - - 11 - - 75 93 99 98 99 106 143 - - - -

PERSISTENT

Financial Details

Key Ratios

Y/E March	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E
ROE	20%	22%	22%	20%	17%	16%	16%	16%
ROCE	23%	28%	23%	21%	18%	15%	18%	19%
Asset Turnover	1	1	1	1	1	1	1	1
Current Ratio	4	3	3	3	3	4	4	4
Debtor Days	69	66	69	67	60	58	58	58
Book Value Per Share	255	306	171	207	237	266	297	333
Payable Days	9	9	10	26	15	20	20	20
Earnings Per Share	47	62	36	37	38	40	45	50
P/E	12	17	20	20	16	18	13	11
Price / Book Value	2	3	4	4	3	3	2	2
EV/EBITDA	7	10	14	14	10	12	7	6
EV/Sales	2	2	3	3	2	2	1	1
Div Payout%	13%	14%	33%	22%	24%	25%	25%	24%

Cash Flow Statement

Y/E March	FY13	FY14	FY15	FY16	FY17	FY18	FY19E	FY20E
PBT	263	343	390	396	401	429	501	558
(inc)/Dec in Working Capital	47	51	28	84	106	106	106	106
Non Cash Op Exp	59	87	49	43	97	108	161	183
Int Paid (+)	-	-	-	-	-	-	-	-
Tax Paid	60	98	100	101	105	121	143	156
others	-	-	-	-	-	-	-	-
CF from Op. Activities	215	281	312	254	286	421	495	556
(inc)/Dec in FA & CWIP	(116)	(58)	(96)	(166)	(218)	(65)	(74)	(135)
Free Cashflow	100	223	216	88	69	356	421	420
(Pur)/Sale of Inv	(1,091)	(1,239)	-	46	0	-	(236)	(222)
others	983	1,099	(126)	44	-4.361	(278)	-	-
CF from Inv. Activities	(171)	(196)	(232)	(116)	(222)	(347)	(310)	(357)
inc/(dec) in NW	-	-	-	-	-	-	-	-
inc/(dec) in Debt	1	2	1	(1)	(0)	(0)	-	-
Int. Paid	(34)	(44)	(0)	(0)	(0)	(0)	0	0
Div Paid (inc tax)	(6)	(7)	(67)	(125)	(58)	(95)	-106	-115
others	-	-	-	-	-	-	0	0
CF from Fin. Activities	(39)	(50)	(66)	(127)	(58)	(96)	(106)	(115)
Inc(Dec) in Cash	6	35	14	11	6	(22)	80	83
Add: Opening Balance	43	48	84	129	140	156	135	215
Closing Balance	49	83	99	140	146	135	215	298

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.

<u>Disclosures</u>: Narnolia Financial Advisors Ltd. (NFAL) (FormerlyMicrosec Capital Ltd.) is a SEBI Registered Research Analyst having registration no. INH300006500. NFALis 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 it's 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 it's 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, AJC 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 con

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.