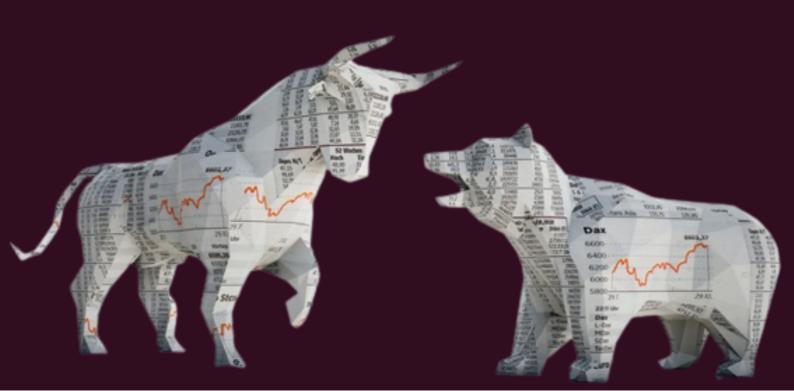


PS - Equity Research Challenge

I don't look to jump over seven-foot bars; I look around for one-foot bars that I can step over.

Hostel - Lohit



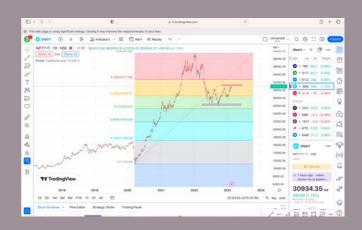
SHORTLISTING ANALYSIS

We narrowed down the sectors by analysing several time frames and selecting those that were not only doing well right now but also demonstrating strength over a longer period of time. For a variety of time frames, ranging from one day to a year, we compared the strength of the indices for each sector to the Nifty 50. We decided that the IT sector was the best sector based on our analysis.

The IT companies that were included in the Nifty Midcap 100 were then selected. By comparing each stock's P/E ratio with the P/E ratio of its sector, we performed a fundamental analysis on each share of stock.

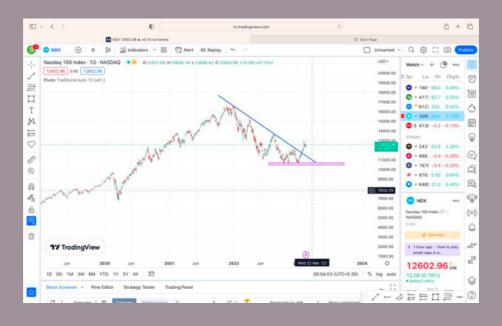
We also checked the ROE and ROCE, and stocks were acceptable if both the values were more than 20%. The Operating Profit Margin(OPM) was compared with the previous year's OPM and the stocks whose OPM have increased this year were shortlisted.

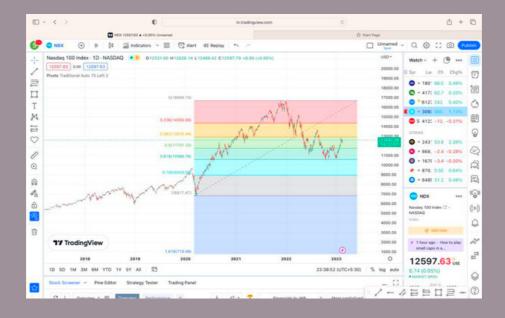




Global sentiment

We also looked at the worldwide IT INDEX, including the NASDAQ 100, a key influencer on all global indices, including Indian indices. In the daily Timeframe, the NASDAQ is seen breaking out of the downtrend and taking support between the levels of 10400 and 10700. With a fibonacci retracement of 0.6/60% from its all-time high, the Nasdaq has likewise made an excellent drop, after a reversal and taking support, and has once more begun to move upward. NASDAQ has developed a bullish "W" Pattern in the daily timeframe which is a bullish pattern.





SECTOR ANALYSIS

With the advent of new technologies like cloud computing, artificial intelligence, and the Internet of Things in recent years, the Indian IT industry has continued to expand. India's IT sector is currently one of the biggest in the world. The large pool of talent that is ready to be skilled makes India's IT sector very lucrative.

Growing demand

The demand for the IT sector has been growing at a rapid pace in recent years. Factors that have contributed to the growth of the IT sector include:

- <u>Increased use of technology in businesses</u> to automate processes, increase efficiency, and enhance customer experience.
- <u>Growing trend towards cloud computing</u> allowing companies to store, process, and access data remotely.
- Use of <u>Big Data and Artificial Intelligence (AI)</u> for organisations to gain insights into their operations and make data-driven decisions.
- Increased demand for cybersecurity firms.
- Growing demand for IT support for India's thriving domestic startup ecosystem.

Valuation

The information technology industry in India comprises information technology services and business process outsourcing. The share of the IT sector in the GDP of India is 7.4% in FY 2022. The IT revenue is estimated at \$227 billion in FY 2022. The domestic revenue of the IT industry is estimated at \$49 billion, and export revenue is estimated at \$181 billion in FY 2022. The IT sector overall has employed 5 million people as of March 2022.

In 2022, companies within the sector faced significant employee attrition and intense competition in hirings. Indian IT revenues grew fastest in a decade to \$227 billion in COVID-19 pandemic-hit FY22. NASSCOM in its Strategic Review predicted that the IT industry can achieve the ambitious target of being US\$ 350 billion by FY26 growing at a rate of 11-14 per cent.

Porter's Five Forces

Threat of New Entrants: Moderate to High

Persistent Systems operates in a highly competitive industry with low barriers to entry. While the company has a strong reputation and customer base, it faces the threat of new entrants offering similar services at lower prices or with more innovative solutions.

Bargaining Power of Suppliers: Low

Persistent Systems has a diverse range of suppliers for its hardware and software requirements, which reduces the bargaining power of any one supplier. Additionally, the company has a strong brand and reputation, which gives it leverage in negotiating with suppliers.

Bargaining Power of Customers: High

The IT services and solutions industry is highly customer-centric, and Persistent Systems must cater to the specific needs and demands of its clients. Customers have a high bargaining power in this industry, as there are many competitors offering similar services and solutions.

Threat of Substitutes: Low

Persistent Systems operates in an industry where there are few substitutes for the services it provides. While there are many competitors, they offer similar services and solutions, rather than true substitutes.

Rivalry Among Existing Competitors: High

The IT services and solutions industry is highly competitive, and Persistent Systems faces intense competition from other established players. The company must continue to innovate and differentiate its offerings to stay ahead of its rivals.

COMPANY ANALYSIS

Persistent Systems is a global services and solutions company delivering Digital Engineering and Enterprise Modernization. It provides software engineering and strategy services to help companies implement and modernise their businesses. It also offers product engineering services, platform-based cloud solutions, and Internet Protocol-based products.

Founder
Anand Deshpande

Year Founded 1990 Revenue(FY22)
Rs.5710.7Cr

Industry/Sector

Market Cap Rs.36,920.54 Cr **EBITDA (FY22)** Rs. 958.17 Cr

Share price Rs.4,830.95 Net Profit Rs.690.4 Cr Dividend yield 0.65%



Anand Deshpande FOUNDER

Anand holds a Bachelor of Technology (B. Tech.) with Honours (Hons.) in Computer Science and Engineering from the Indian Institute of Technology (IIT), Kharagpur, and an M.S. and a Ph.D. in Computer Science from Indiana University, Bloomington, Indiana, USA. He has been recognized by both his alma maters — as a Distinguished Alumnus in 2012 by IIT Kharagpur and by the School of Informatics of Indiana University with the Career Achievement Award in 2007.

Business segment

1. Insurance, Banking & Financial Services:

 Persistent has a proven track record of delivering value to leading US property, causality, and life insurance providers through the reliable delivery of digital solutions, including ready-to-use accelerators.

2. Healthcare:

 With top software and solution partners, Persistent drives revolutionary projects in the areas of population health management, operations, patient engagement, and data, analytics, and business intelligence.

3. Life Sciences:

• The Persistent Life Sciences branch assists manufacturers of pharmaceuticals, medical devices, and analytical instruments in using technology more effectively to develop and market new goods. The business creates the software that creates the future connected digital lab and makes it possible for pharmaceutical corporations to easily carry out decentralised trials. Supporting 3 of the top 5 contract research organisations (CROs) and 6 of the top 10 device manufacturers is part of a long history of considerable industry experience.

4. Software and Hi-Tech

5. Industrial

 The industrial value chain is consistently integrated. By tightly integrating dated design and engineering, production, and operational systems with cutting-edge software, processes, and analytics tools, the organisation creates commercial value.

6. Telecom and Media

Persistent supports communications and media organisations.
 The business offers solutions that enable businesses to create new products more quickly, control operating expenses, and gain insights from performance data. These solutions promote agility and responsiveness.

Cost structure

Persistent Systems has a cost-driven structure, aiming to minimise expenses through significant automation. Its biggest cost is the cost of purchased software licences, a variable expense. Other major drivers are in the areas of customer support/operations and sales/marketing, both fixed costs.

Revenue

Persistent Systems has one revenue stream: revenues it generates from the sale of its products to its customers. Persistent FY22 revenues grew by 35.2% year-on-year to \$765 million and it is inching towards the \$ one billion annual revenue mark in FY23. Focus on large customers is expected to help the company sign larger deals. The company has forecast robust demand in FY23 with no headwinds expected due to any geopolitical concerns or global economic indicators.

Customer Segments

Persistent Systems has a mass market business model, with no significant differentiation between customer groups. The company targets its offerings at firms across industries and sizes.

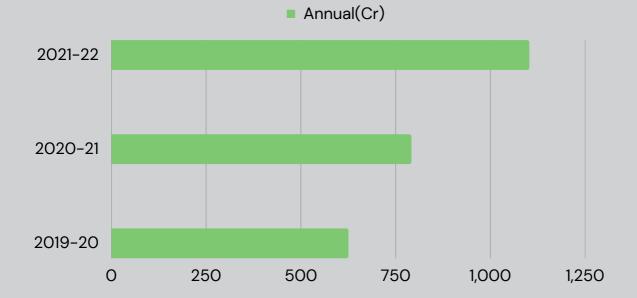
Strengths and Differences

- Persistent Systems specialises in healthcare, banking and retail which enables the company to provide targeted solutions and better understand its clients' specific needs.
- By offering practical insights, Persistent ExtenSURE's data-driven approach aids software firms in extending the life of their legacy products and helping them maintain their competitiveness in the face of unsustainable resource allocation for legacy product maintenance and customer support.
- Persistent Systems is known for its focus on niche areas, such as product engineering services and digital transformation.
- Collaborating with hyperscale companies such as Amazon Web Services(AWS), IBM and Microsoft in emerging technologies is expected to make Persistent more competitive and future proof its business for the next phase of growth.
- Persistent Systems' extensive product portfolio has been instrumental in the company's success in reaching various customer segments within the software and programming industry. This diversification of product offerings has also supported the organisation in generating multiple revenue streams enhancing its overall financial performance.

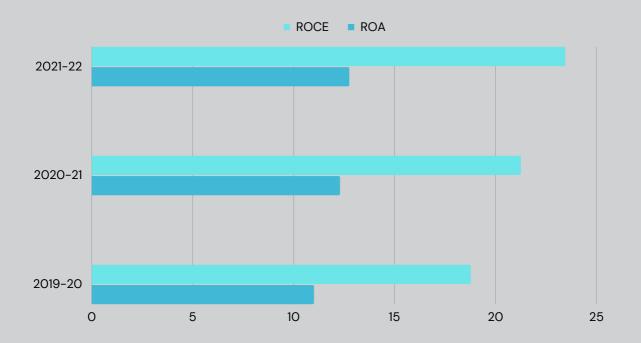
QUANTITATIVE ANALYSIS

FINANCIAL RATIOS	2021-22	2020-21	2019-20	
OPERATING RESULTS				
Net sales (cr)	5,854.7	4295.7	3698.2	
EBDIT (cr)	1102.1	790.8	624.6	
Earning per share	90.34	58.97	44.38	
Book value per share	440.7	365.8	312.2	
Net profit per share	89.74	66.09	5.35	
SOURCE OF FUNDS				
Reserve (cr)	3242.46	2689.10	2222.11	
Net worth (cr)	3362.44	2789.93	2379.98	
Debt (cr)	442.68	296.63	288.31	
Net Working Capital (cr)	1585.96 1125.89		744.70	
RATIOS				
EBT to sales(%)	119.34	87.41	69.73	
Return on Net Worth(%)	20.66	18.26	17.73	
ROCE(%)	23.44	21.24	18.76	
ROA(%)	12.75	12.29	11.00	
Net profit margin(%)	12.08	10.76	9.54	
Operating margin(%)	16.37	15.90	13.31	
Asset turnover ratio	0.9	0.8	0.8	
Current ratio	2	3.5	3.1	
Debt to Equity ratio	0.1	0	0	

EBDIT



ROCE AND ROA



GROWTH RATIOS

	CAGR 3 yrs	CAGR 5yrs
ROA (%)	1.2	-0.1
ROCE (%)	4.5	1.9
ROE (%)	11	5.2

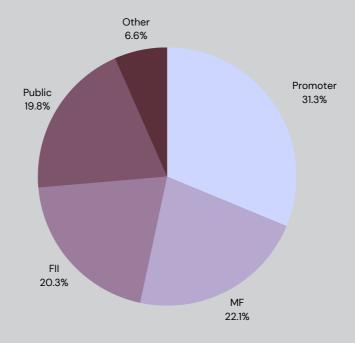
PER SHARE RATIOS



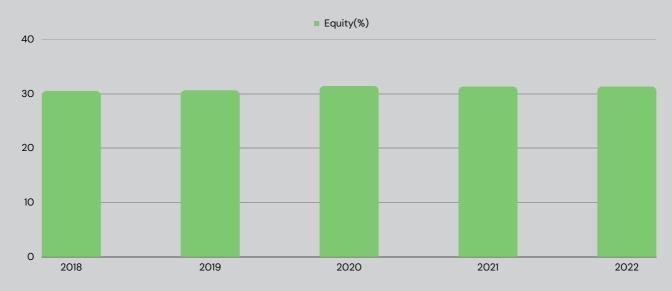
CASH FLOW STATEMENT

In Cr.	Mar 22	Mar 21	Mar 20	
Net cash flow from operating activities	844.9	735.9	322.8	
Net cash from investing activities	-977.3	-541.7	-14.8	
Net cash from financing activities	- I 1823		-329.1	
Net Cash Flow	49.9	50	7.6	

SHAREHOLDING SUMMARY



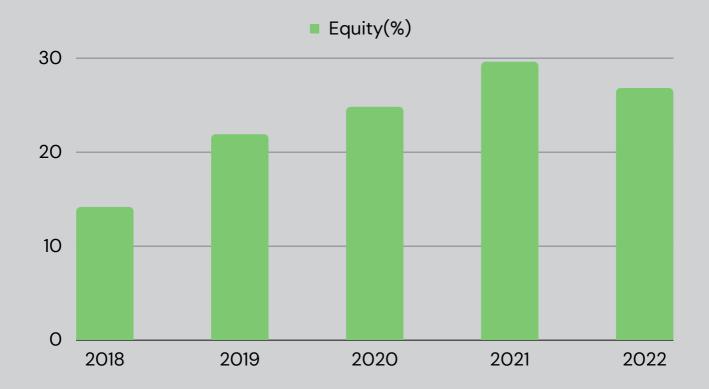
HISTORIC PROMOTER HOLDINGS



HISTORIC FII HOLDINGS



HISTORIC DII HOLDINGS



HISTORIC MUTUAL FUNDS HOLDINGS

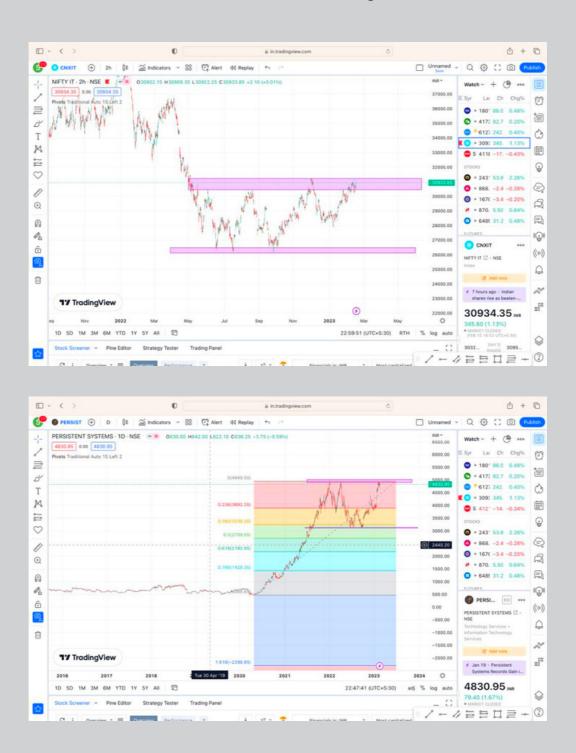


DCF FORECASTING

Year A/P	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Revenue	3033	336	369	429	585	689	8114.	9553.	11247.	1324
	.70	5.94	8.20	5.70	4.70	2.73	81	56	40	1.56
Revenue(%)	-	10.9 5	9.8	13.9 O	36.2 9	17.73	17.73	17.73	17.73	17.7 3
Operating	421.2	432.	322.	735.	844.	915.	1077	1268.	1492.	1756
Cash Flow		3	81	92	98	94	.83	34	51	.31
Operating Cash Flow(%)	13.88	12.8 4	9.05	17.57	14.8 O	13.6 3	13.6 3	13.63	13.63	13.6 3
Capital	-65.	-37.	-75.	-128.	-38	-20	-24	-283.	-333.	-39
Expenditure	45	90	83	10	5.39	4.53	0.68	22	28	2.19
Capital Expenditure (%)	-2.16	-1.13	-2.13	-3.0 6	-6.7 5	-3.0 4	-3.0 4	-3.04	-3.04	-3.0 4
Free Cash	355.	394.	246.	607.	459.	711.4	837.	985.11	1159.2	1364
Flow	73	40	97	82	58	1	15		3	.12

TECHNICAL ANALYSIS

From the chart, it is also clear that the NIFTY IT index found significant support around the 26200–26500 price range. Since then, the IT index has been on the rise, establishing higher highs and lower lows, and exhibiting an optimal fibonacci retracement of 0.6/60% for the present trend. Persistent systems also exhibit a similar trend and retracement, proving that the stock is a prime candidate for the Nifty. We can also see that the persistent system has been on an upward trend ever since it was listed. This demonstrates the stock's strong technical characteristics, which make it an excellent long-term investment.



INVESTMENT HYPOTHESIS

Growth drivers

- The company's ability to work with the hyper-scale companies allows it an opportunity to grow these business segments.
- Company's accessibility and brand value achieved through its social media pages, advertising, sponsorships, summits, exhibits, and conferences.
- Favourable government policies like Establishment of Software Technology Parks and Special Economic Zones; Digital India; tax incentives and; launch of nation policy on software products.

Risks and concern

- Competition: Persistent Systems operates in a highly competitive market, with competition from large technology companies, as well as from smaller, niche players. This can impact the company's market share and profitability.
- Market conditions: The technology industry is subject to rapidly changing market conditions, which can affect the demand for Persistent Systems' products and services.
- Financial performance: Persistent Systems has a history of fluctuating financial performance, with fluctuations in revenue, profits, and cash flow.

PEER ANALYSIS

Infosys Ltd.

Market Cap - 672,051.54 cr

Infosys Ltd. is a consulting, technology, and outsourcing firm that delivers end-to-end business solutions to clients internationally operating in a range of industrial categories, enabling them to improve business performance. The company's main industry segments are financial services and insurance, which include businesses that offer banking, finance, and insurance services. Other industry segments include manufacturing, businesses in the energy, utilities, communication, and services sectors, as well as retail, consumer packaged goods, logistics, and life sciences. IT Services, Engineering Services, Consulting Services, BPO Services, and Products and Platforms are among the services it provides.

HCL Technologies Ltd.

Market Cap- 307,431.12 cr

Leading global IT services provider HCL Technologies Limited works with multinational corporations to re-imagine and revolutionise their industries via the use of digital technologies. The company's main business activities include offering a variety of infrastructure, business process outsourcing, and software services. It utilises intellectual properties and a sizable offshore global technical workforce to provide solutions across a few specific industries, including monetary services Manufacturing Technology & Life Sciences Medical Services Community Services Shops and CPG Gas & Oil Utility & Energy Travel Logistics & Transportation Telecom Publishing and entertainment in government media.

TCS

Market Cap- 1,288,223.93 cr

One of the biggest international IT service and consulting firms is Tata Consultancy Services (TCS). Although it has offices all around the world, its headquarters are in Mumbai, India. In the areas of banking and financial services, telecommunications, education, and healthcare, TCS is well-known.

Stock	PE TTM Price to Earnings	Market capitaliza tion in crores	Net Profit Qtr in crores	Net Profit Annual YOY Growth%	Operatin g Revenues Qtr in crores	Revenue Growth Qtr YOY %	Price To Book Value
Persiste nt Systems	42.41	36,920. 54	237.95	53.19	2,169.37	45.43	10.96
Tata Consult ancy	31.67	1,288,22 3.93	10,846	18.18	58,229	19.11	14.34
Infosys Ltd	28.41	672,051. 54	6586	14.26	38,318	20.24	8.88
HCL Technol ogies Ltd	21.26	307,431. 12	4096	21.12	26,700	19.56	4.96
Wipro Ltd	19.67	223,547. 35	3052.9	13.27	23,229	14.34	3.42
LTIMind tree Ltd	47.58	140,299. 86	1,000.5	18.63	8,620	108.33	15.93

SUMMING UP

Persistent Systems has ₹5.60b in net cash and a decent-looking balance sheet. The price trend analysis indicated the stock to be a bit overvalued but its strong fundamentals make it healthy for long term investment. Further its EBIT growth of 53% over last year floats it from any debt risks.

Our technical analysis predicts as upward movement of stock with target price of 6050

ESG ANALYSIS

- Environmental impact: By encouraging eco-friendly programmes including carbon emissions reduction, paperless offices, and energy saving, Persistent Systems is dedicated to lessening its influence on the environment. Additionally, the business promotes environmental responsibility among its staff and has taken a number of steps to lessen its carbon footprint.
- <u>Social responsibility</u>: Persistent Systems is deeply committed to social responsibility and supports a range of programmes in the fields of community development, healthcare, and education. The corporation supports employee volunteerism and has put in place a number of programmes to encourage diversity and inclusion.
- Governance: Persistent Systems has a robust governance system in place, which consists of a dedication to ethical business practises, a well defined code of conduct, rules and processes for risk management. The corporation also maintains transparency in its financial reporting and has a well-diversified board of directors, with a majority of independent members.



Sources:

Annual report - Persistent Sys Moneycontrol Trendlyn Tradingview

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