A STUDY ON TECHNICAL ANALYSIS OF LISTED SECURITIES WITH REFERENCE TO IT INDUSTRY

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Abstract

The Information Technology (IT) sector is a rapidly evolving and dynamic industry that plays a vital role in today's economy. With the ever-increasing reliance on technology, businesses require technical expertise to stay competitive. Technical analysis is a vital tool for understanding and interpreting market data and trends to make informed investment decisions in the IT sector. In this context, technical analysis involves using various tools and techniques to analyze historical price and volume data to predict future market trends. These techniques include relative strength index, simple moving average, volume analysis etc. Technical analysts also use quantitative methods to measure and evaluate market risk and profitability. As the IT sector continues to grow and evolve, technical analysis is becoming increasingly important for investors and businesses alike. It provides a valuable means of understanding market behavior and identifying potential opportunities and risks. To succeed in the IT industry, professionals must stay up-to-date with the latest trends, tools, and technologies. Technical analysis is a crucial component of this, as it provides a way to identify and leverage opportunities in the market. By staying current with technical analysis techniques and tools, IT professionals can make informed decisions that drive innovation and growth.

Keywords: Technical analysis, simple moving average, stock market, relative strength index.

Introduction

The growth potential of the IT sector is high, as the demand for digital solutions continues to increase across various industries and geographies. The COVID-19 pandemic has accelerated the adoption of digital technologies, creating new opportunities for companies in the IT sector to innovate and expand their market share. However, the sector also faces significant challenges, including intense competition, changing customer needs, and regulatory and ethical concerns.

Technical analysis is a method used by traders and investors to evaluate securities, such as stocks, based on historical price and volume data. It is commonly used to identify potential trends and patterns in the stock market, as well as to make buy and sell decisions.

In this paper, we will be viewing a technical analysis of a selected stock, using a variety of tools and techniques,

such as charting, trend analysis, and technical indicators. The aim is to identify potential trading opportunities based on the stock's historical price and volume data, as well as to evaluate the stock's performance relative to the broader market.

To complete this research, we have selected a publicly traded company and collected historical price and volume data for the stock. We have used technical analysis tools and techniques to analyze the data and identify potential trends and patterns. We also evaluate technical indicators, such as moving averages, relative strength index (RSI), and stochastic oscillators, to identify potential buy and sell signals.

By the end of this research we have a solid understanding of technical analysis for stocks and be able to apply technical analysis tools and techniques to identify potential trading opportunities. We were also able to evaluate the performance of a stock relative to the broader market, and make informed buy and sell decisions based on your analysis.

Objectives

- To research the applicability of technical analysis in India's IT industry
- To research the market share price alterations in significant IT firms.
- To keep track of which company the stock market rewards favorably.
- To use technical analysis to examine the performance of a certain Technology industry and to predict future share price patterns.
- To make appropriate recommendations to the investors.

Review of literature

- 1) Kaushik, S., Umamaheswari, S., & Lilian, P. T. J. K: The article explains about a pattern that has been collected and evaluated for prediction of future prices. As the price of the share will not be constant due to several internal and global changes in the economy. several methods had been used to analyze the reasons for change. Proposed Approach, Pre-processing, Feature Selection. Input Samples considered in this literature are classified into three models: Stock Prediction Models, CREST Prediction, Performance Evaluation and considered in a ratio of 80:20. The changes base is considered only on the opening price of the share and the pattern that is followed.
- 2) Mushthaq Ahammed, K. INTRINSIC VALUE OF SHARES OF IT COMPANIES IN INDIA: As we know that machine learning which is a booming topic where it been used as a technique about advancing and new possibilities for the prediction of the portfolio.the paper majorly concentrated on hybrid approach where mean is one and the next is random forest, extreme gradient boosting, adaptive boosting, support vector, machine regression and other major concepts are prioritized.the samples depicts the prediction outperformance.
- 3) Dhutti, K. (2014): Calculation of risk and return of selected securities. 3. Beta: Beta is a measure of the volatility or systematic risk of a stock or By subtracting the risk-free rate from the average rate of return, the risk-taking results can be extracted. The takeaway from this calculation is that a portfolio that invests in risk-free assets, such as For example, buying US Treasury bills (whose expected return is the risk-free rate) has a zero Sharpe ratio. In general, the higher the Sharpe ratio, the more attractive the risk-adjusted return. Sharpe Ratio = Average Return Risk Free RateThe global sourcing market in India continues to grow at a higher pace compared to the IT BPM industry.
- 4) Koti, K. (2013): The study has been made to know the impact of the dividend policy of the IT companies on and Earning per Share (EPS) are considered as independent variables related to the dividend and Return on Keywords: Dividend, Firm Performance, Earnings per Share, Price Earnings Ratio, Return on Assets and The dividend policy of a company is one of the many aspects that dividend policies of the company.the objectives of the research, statistical methods such as correlation and multiple regressions were used. When conducting research on the connection between company performance and dividend policy, the following metrics were used as independent variables: dividend payout ratio, earnings per share, price According to the findings of the research, there was also a disparity between the share price regression analysis to investigate the influence of dividends per share on the market price per share of 63 research also demonstrated that dividend yield has a detrimental impact on profits per share.. investigated how dividend policies influence the prices of shares offered by commercial dividend policy and share price.

5) Technical analysis is a method of predicting the future price of stocks based on its past performance (It is a method of evaluating stocks by analyzing charts and other tools to identify patterns that may indicate future movements in stock prices, as they believe that historical performance of stocks and markets are indicators of future performance. articles where technical analysis helps investors analyze a company's financial strength, earnings growth and profitability. and Hartono (2013) found in their study that individual investors (technical analysis signals to identify a reaction to the announcement, technical analysis signals before the signals have the ability to generate profits, attempt to provide a technical analysis of IT stocks, therefore the CNX IT Index is used as it provides investors and market 2. Analysis of the ratio and relative strength of 3. Analyze IT stock risk and return versus CNX IT Index at Beta Risk-averse investors are advised to stay away from Infosys stocks as they are highly volatile and risky. Investors can expect a % investment in TCS stock as it is less risky and generates a HCL stock has performed strongly over the year at Investors can invest in these stocks to make big short-term gains

Research methodology

The selected IT businesses listed on the National Stock Exchange (NSE) of India are used in this research study to determine the impact of stock price fluctuation. The data and information have been taken from a secondary source, such as websites for the corporation, periodicals, newspapers, and the New York Stock Exchange. Out of the Big 10, the sample unit includes 5 Indian IT businesses listed on the NSE.

A conceptual framework for conducting research, research design serves as the guide for data collecting, measurement, and analysis. A research design consists of choices for what, where, how much, and how to conduct an enquiry. Secondary data are utilized in this analytical investigation. For analysis, stratified random sampling is utilized as the sample method. The information was obtained from the website. The three-year study spans from January 14, 2023, through March 29, 2023.

Stocks selected for the analysis include the following companies:

- 1) Wipro Ltd.
- 2) HCL Technologies Ltd
- 3) Infosys
- 4) Tata Consultancy Service Ltd
- 5) Tech Mahindra

Wipro Ltd.

A worldwide company based in India is called Wipro Limited (formerly known as Western India Palm Refined Oils Limited). Customers from all around the world can benefit from its provision of digital strategy, customer-centric design, consultancy, infrastructure services, business process services, research and development, cloud, mobility, advanced analytics, and product engineering. The corporation, which operates in 55 countries, receives around 60% of its sales from the Americas (largely the US). Aerospace and defence, automotive, finance, communications, electronics, building, healthcare, pharmaceuticals, retail, and oil and gas are just a few of the several industries that Wipro provides services to. Wipro purchased Capco in 2021 for roughly \$1.45 billion. Since July 2020, Thierry Delaporte has been the CEO and managing director of Wipro.

| Period | Simple | Signal |
|--------|--------|--------|
| MA5 | 389.86 | Buy |
| MA10 | 394.21 | Buy |
| MA20 | 394.55 | Buy |
| MA50 | 451.42 | Sell |
| MA100 | 515.25 | Sell |
| MA200 | 395.60 | Buy |

Moving average: Simple

| Period | Simple | Signal |
|--------|--------|--------|
| MA5 | 389.86 | Buy |
| MA10 | 394.21 | Buy |
| MA20 | 394.55 | Buy |
| MA50 | 451.42 | Sell |
| MA100 | 515.25 | Sell |
| MA200 | 395.60 | Buy |

Moving average: Exponential

| Period | Exponential | Signal |
|--------|-------------|--------|
| MA5 | 395.34 | Buy |
| MA10 | 393.33 | Buy |
| MA20 | 399.95 | Buy |
| MA50 | 442.94 | Sell |
| MA100 | 451.26 | Sell |
| MA200 | 410.16 | Sell |

A moving average (MA) is a stock indicator commonly used in technical analysis, used to help smooth out price data by creating a constantly updated average price. A rising moving average indicates that the security is in an uptrend, while a declining moving average indicates a downtrend.

As long as the 50-day moving average of a stock price remains above the 200-day moving average, the stock is generally thought to be in a bullish trend. Since Wipro M50>M200 the stock is bullish.

Resistance & support

| Date | S3 | S2 | S1 | R1 | R2 | R3 |
|---------|--------|--------|--------|--------|--------|--------|
| 18/1/23 | 373.90 | 379.50 | 386.70 | 399.50 | 405.10 | 412.30 |
| 17/1/23 | 379.50 | 384.39 | 387.41 | 397.19 | 400.21 | 405.10 |
| 16/1/23 | 390.38 | 391.55 | 392.73 | 395.07 | 396.25 | 397.42 |
| 13/1/23 | 374.70 | 379.90 | 387.50 | 400.30 | 405.50 | 413.10 |
| 12/1/23 | 371.80 | 371.96 | 389.50 | 402.30 | 402.44 | 404.76 |
| 11/1/23 | 375.99 | 390.09 | 397.09 | 397.50 | 400.76 | 400.06 |
| 10/1/23 | 390.86 | 379.33 | 376.70 | 401.66 | 390.08 | 408.40 |

Volume analysis



Therefore weekly volume analysis of Wipro Ltd. Is 45.41%.

History of share prices

| Date | Open | High | Low | Close |
|------------|--------|--------|--------|--------|
| 18-01-2023 | 397.85 | 403.75 | 397.85 | 403.20 |
| 17-01-2023 | 400.00 | 402.00 | 393.80 | 396.15 |
| 16-01-2023 | 394.00 | 400.90 | 389.80 | 398.65 |
| 13-01-2023 | 397.20 | 397.20 | 386.65 | 393.65 |
| 12-01-2023 | 394.65 | 397.70 | 390.50 | 394.45 |
| 11-01-2023 | 392.50 | 396.00 | 391.35 | 393.95 |
| 10-01-2023 | 392.10 | 393.75 | 387.35 | 393.05 |

There is growth in the price of shares in the past one week. The stock value has gone up by 10.3 in one week. Relative strength index

| Trade Date | Period | RSI |
|------------|--------|----------|
| 2023-01-20 | 14 | 60.49682 |
| 2023-01-19 | 14 | 60.86316 |
| 2023-01-18 | 14 | 60.68633 |
| 2023-01-17 | 14 | 54.0882 |
| 2023-01-16 | 14 | 57.00635 |
| 2023-01-13 | 14 | 51.98121 |
| 2023-01-12 | 14 | 52.71155 |
| 2023-01-11 | 14 | 52.03362 |
| 2023-01-10 | 14 | 51.23463 |
| 2023-01-09 | 14 | 50.02691 |

| Fields | Values |
|-----------------|---------|
| Share Price | 403.15 |
| Previous Price | 393.90 |
| Price Change | 2.35 % |
| RSI | 60.05 |
| Signal with RSI | Neutral |

It is an indicator used to identify overbought or oversold condition in the stock. As per Wilder when RSI value is above 70 it is considered as overbought and when RSI is below 30 it is considered as oversold. Since RSI is between 30 & 70 it is neutral.

Summary

| Title | Sell | Neutral | Buy |
|----------------------|------|---------|------|
| Moving Averages | 42% | - | 58% |
| Momentum Oscillators | 33% | 17% | 50% |
| Trend Oscillators | 33% | 34% | 33% |
| Volatility | - | 1 | 100% |

Chart Analysis



There is a significant growth in the company in the past one month.

HCL Tech LTD.

HCL Technologies Limited HCLTech, formerly known as Hindustan Computers Limited, is a Noida-based international provider of information technology (IT) services and consultancy. When HCL entered the software services industry in 1991, it became an independent firm. With nearly 210,966 people, the corporation operates offices in 52 different countries. The Forbes Global 2000 list includes HCL Tech. With a market capitalization of 279,209 crore as of March 2022, it is one of India's top 20 largest publicly traded firms.

| Period | Simple | Signal |
|--------|---------|--------|
| MA5 | 1114.78 | Sell |
| MA10 | 1113.41 | Sell |
| MA20 | 1113.75 | Sell |
| MA50 | 1098.45 | Buy |
| MA100 | 1074.53 | Buy |
| MA200 | 1055.16 | Buy |

Moving average: Simple

| Period | Simple | Signal |
|--------|---------|--------|
| MA5 | 1114.78 | Sell |

| MA10 | 1113.41 | Sell |
|-------|---------|------|
| MA20 | 1113.75 | Sell |
| MA50 | 1098.45 | Buy |
| MA100 | 1074.53 | Buy |
| MA200 | 1055.16 | Buy |

Moving average: Exponential

| Period | Exponential | Signal |
|--------|-------------|--------|
| MA5 | 1112.21 | Sell |
| MA10 | 1113.33 | Sell |
| MA20 | 1111.50 | Sell |
| MA50 | 1099.08 | Buy |
| MA100 | 1082.44 | Buy |
| MA200 | 1073.60 | Buy |

A moving average (MA) is a stock indicator commonly used in technical analysis, used to help smooth out price data by creating a constantly updated average price. A rising moving average indicates that the security is in an uptrend, while a declining moving average indicates a downtrend.

As long as the 50-day moving average of a stock price remains above the 200-day moving average, the stock is generally thought to be in a bullish trend. Since HCL M50>M200 the stock is bullish.

Resistance & support

| Name | S3 | S2 | S1 | Pivot Points | R1 | R2 | R3 |
|---------|---------|---------|---------|--------------|---------|---------|---------|
| 18/1/23 | 1105.84 | 1108.67 | 1110.34 | 1113.17 | 1114.84 | 1117.67 | 1119.34 |
| 17/1/23 | 1108.67 | 1110.39 | 1111.45 | 1113.17 | 1114.89 | 1115.95 | 1117.67 |
| 16/1/23 | 1110.76 | 1111.17 | 1111.59 | 1113.17 | 1112.41 | 1112.83 | 1113.24 |
| 13/1/23 | 1105.26 | 1108.38 | 1109.76 | 1112.88 | 1114.26 | 1117.38 | 1118.76 |
| 12/1/23 | 1102.63 | 1105.89 | 1109.50 | 1112.75 | 1114.00 | 1115.99 | 1115.96 |
| 11/1/23 | 1105.63 | 1108.36 | 1105.49 | 1114.25 | 1111.25 | 1114.63 | 1117.20 |
| 10/1/23 | 1106.28 | 1107.25 | 1108.36 | 1113.49 | 1113.33 | 1113.59 | 1118.96 |

Volume analysis





Therefore weekly volume analysis of HCL Tech Ltd. Is 70.85%.

History of share prices

| Date | Price | Open | High | Low |
|--------------|----------|----------|----------|----------|
| Jan 20, 2023 | 1,107.80 | 1,111.05 | 1,121.40 | 1,107.05 |
| Jan 19, 2023 | 1,111.40 | 1,102.35 | 1,113.35 | 1,098.75 |
| Jan 18, 2023 | 1,115.15 | 1,118.95 | 1,125.85 | 1,114.10 |
| Jan 17, 2023 | 1,111.05 | 1,097.90 | 1,113.95 | 1,095.00 |
| Jan 16, 2023 | 1,093.70 | 1,087.00 | 1,100.45 | 1,078.55 |
| Jan 13, 2023 | 1,077.80 | 1,043.90 | 1,084.00 | 1,041.00 |
| Jan 12, 2023 | 1,071.65 | 1,061.00 | 1,074.50 | 1,061.00 |
| Jan 11, 2023 | 1,054.80 | 1,069.00 | 1,079.60 | 1,050.55 |
| Jan 10, 2023 | 1,063.85 | 1,061.00 | 1,072.60 | 1,056.30 |

There is growth in the price of shares in the past one week. The stock value has gone up by 56.2 in one week. Relative strength index

| Trade Date | Period | RSI |
|------------|--------|----------|
| 2023-01-20 | 14 | 65.31101 |
| 2023-01-19 | 14 | 67.1991 |
| 2023-01-18 | 14 | 69.13224 |
| 2023-01-17 | 14 | 68.20361 |
| 2023-01-16 | 14 | 63.94087 |
| 2023-01-13 | 14 | 59.29742 |

| Trade Date | Period | RSI |
|------------|--------|----------|
| 2023-01-12 | 14 | 57.32359 |
| 2023-01-11 | 14 | 51.31738 |
| 2023-01-10 | 14 | 55.19124 |
| 2023-01-09 | 14 | 56.77431 |

| Fields | Values |
|----------------|---------|
| Share price | 1107.80 |
| Previous price | 1077.80 |
| Price change | 2.78% |
| RSI | 65.74 |
| Signal | Neutral |

It is an indicator used to identify overbought or oversold condition in the stock. As per Wilder when RSI value is above 70 it is considered as overbought and when RSI is below 30 it is considered as oversold. Since RSI is between 30 & 70 it is neutral.

| Title | Sell | Neutral | Buy |
|----------------------|-------|---------|------|
| Moving Averages | - | -V 2 | 100% |
| Momentum Oscillators | 29% | - | 71% |
| Trend Oscillators | -27 P | - | 100% |
| Volatility | 7// | | 100% |

Chart analysis



There is a significant growth in the company in the past one month.

Infosys Ltd

Infosys Limited is engaged in consulting, technology, outsourcing, and next-generation digital services. Its segments are enterprises in Financial Services and Insurance; enterprises in Manufacturing; enterprises in Retail, Consumer Packaged Goods and Logistics; enterprises in Energy, Utilities, Resources and Services; enterprises in

Communication, Telecom OEM and Media; enterprises in Hi-Tech; enterprises in Life Sciences and Healthcare; and all other segments. All other segments represent the operating segments of businesses in India, Japan, China, Infosys Public Services, and other enterprises in public services. Its core services include application management services, proprietary application development services, independent validation solutions, product engineering and management, infrastructure management services, traditional enterprise application implementation, and support and integration services. Its products and platforms include Finacle, Panaya, Skava, and LEAP.

Moving Average

| Moving Averages: Classic | | |
|---------------------------|-----------------------------------|--------------------|
| ndicator | Simple | Signal |
| s - SMA | 1,537.52 | Bullish |
| 0 - SMA | 1,534.06 | Bullish |
| 0 - SMA | 1,510.99 | Bullish |
| 0 - SMA | 1,547.90 | Bearish |
| 00 - SMA | 1,512.01 | Bullish |
| | | |
| Moving Averages: Exponent | Simple | Signal |
| | | Signal Bullish |
| ndicator | Simple | |
| - EMA | Simple 1,533.83 | Bullish |
| - EMA | Simple 1,533.83 1,529.01 | Bullish Bullish |
| - EMA D - EMA | Simple 1,533.83 1,529.01 1,523.73 | Bullish Bullish |

A moving average (MA) is a stock indicator commonly used in technical analysis, used to help smooth out price data by creating a constantly updated average price. A rising moving average indicates that the security is in an uptrend, while a declining moving average indicates a downtrend. Here, the stock is in a bullish trend.

Resistance and Support

| DATE | 1/9/202 | 1/10/202 | 1/11/202 | 1/12/202 | 1/13/202 | 1/16/202 | 1/17/202 | 1/18/202 | 1/19/202 |
|--------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| Resistance 3 | 1540.95 | 1510.94 | 1518.84 | 1522.06 | 1577.44 | 1560.6 | 1564.66 | 1563.89 | 1573.65 |
| Resistance 2 | 1515.15 | 1497.42 | 1506.42 | 1503.53 | 1548.42 | 1544.3 | 1553.43 | 1557.87 | 1561.6 |
| Resistance 1 | 1499.8 | 1481.09 | 1488.84 | 1492.06 | 1526.04 | 1534.9 | 1546.46 | 1551.64 | 1550.25 |

| Support 1 | 1458.65 | 1451.24 | 1458.84 | 1462.06 | 1414.64 | 1509.2 | 1528.26 | 1539.39 | 1538.85 |
|-----------|---------|---------|---------|---------|---------|--------|---------|---------|---------|
| Support 2 | 1432.85 | 1437.72 | 1446.42 | 1443.53 | 1445.62 | 1492.9 | 1517.03 | 1533.37 | 1514.8 |
| Support 3 | 1417.5 | 1421.39 | 1428.84 | 1432.06 | 1423.24 | 1483.5 | 1510.06 | 1527.14 | 1503.45 |

Price and Volume Analysis

Volume Analysis is an example of a type of technical analysis that examines the volume of traded securities to confirm and predict price trends. Volume is a measure of the number of shares of an asset that are traded in a given period of time.



History of Share Prices

| DATE | OPEN | HIGH | LOW | CLOSE |
|-----------|----------|----------|----------|----------|
| 19-Jan-23 | 1,539.90 | 1,549.55 | 1,526.15 | 1,538.90 |
| 18-Jan-23 | 1,544.75 | 1,551.85 | 1,539.60 | 1,545.40 |
| 17-Jan-23 | 1,527.00 | 1,542.20 | 1,524.00 | 1,539.50 |
| 16-Jan-23 | 1,510.00 | 1,528.00 | 1,502.30 | 1,525.50 |
| 13-Jan-23 | 1,483.50 | 1,519.40 | 1,468.00 | 1,503.65 |
| 12-Jan-23 | 1,481.95 | 1,485.00 | 1,455.00 | 1,480.60 |
| 11-Jan-23 | 1,470.00 | 1,494.00 | 1,464.00 | 1,471.25 |
| 10-Jan-23 | 1,482.00 | 1,483.90 | 1,454.05 | 1,469.75 |
| 9-Jan-23 | 1,448.20 | 1,489.35 | 1,448.20 | 1,484.45 |

There is a growth in the stock and the growth is by almost 100 points.

Relative Strength Index

| Trade Date | Period | RSI |
|------------|--------|----------|
| 2023-01-27 | 14 | 48.59233 |
| 2023-01-25 | 14 | 54.95647 |
| 2023-01-24 | 14 | 57.56911 |
| 2023-01-23 | 14 | 56.73212 |
| 2023-01-20 | 14 | 51.6323 |
| 2023-01-19 | 14 | 55.22664 |
| 2023-01-18 | 14 | 57,0213 |
| 2023-01-17 | 14 | 55,81097 |
| 2023-01-16 | 14 | 52.88766 |
| 2023-01-13 | 14 | 47.89187 |
| 2023-01-12 | 14 | 41.85181 |
| 2023-01-11 | 14 | 39,19711 |
| 2023-01-10 | 14 | 38.78076 |
| 2023-01-09 | 14 | 41.35789 |

Technical Analysis

| Title | Sell | Neutral | Buy | Action |
|----------------------|------|---------|-----|-------------|
| Moving Averages | 83% | - | 17% | Strong Sell |
| Momentum Oscillators | 100% | - | - | Strong Sell |
| Trend Oscillators | 100% | - | - | Strong Sell |
| Volatility | 100% | - | - | Strong Sell |

Infosys Technical Analysis offers an overview of the Technical Indicators, Classic Moving Average, Exponential Moving Average and more. It helps to analyze the price trends, patterns and trading signals. On Classic Moving Average Scale Infosys shows a 1,510.99 for 20 - DMA, 1,547.90 for 50-DMA and 1,512.01 for 100-DMA. On Exponential Moving Average Scale Infosys shows a 1,523.73 for 20 - DMA, 1,527.51 for 50-DMA and 1,528.70 for 100-DMA. While understanding and analyzing Technicals of a company is crucial, it is equally important to look at the share price, stock performance, fundamental analysis, financial statements and similar stock comparisions. It gives a sense of whether the company is growing, stable or deteriorating.

Tata Consultancy Service Ltd

Tata Consultancy Services is an IT solution provider.TCS offers a consulting-led, integrated portfolio of IT and IT-enabled services delivered through its unique Global Network Delivery Model, recognized as the benchmark of excellence in software development. The Company's segments include Banking, Financial Services and Insurance, Manufacturing, Retail and Consumer Business, Communication, Media and Technology, Life Sciences and Healthcare and Others.

Resistance and Support

1) Resistance: Resistance is a predetermined level from where the prices stop rising. It can also be referred to as a level on the chart where the traders expect maximum supply for the stock. The logic behind this is that

- as the price advances towards resistance, sellers become more inclined to sell and buyers become less inclined to buy. Whenever the prices touch the resistance level it begins to fall and if the prices break the resistance level then it continues to rise.
- 2) Support: Support is a predetermined level below which the price stopped falling further down. It is a level at which the traders expect maximum demand for the stock. The logic dictates that as the price declines towards support and gets cheaper, buyers become more inclined to buy and sellers become less inclined to sell. Whenever the prices touch the support level it bounces back and begins to rise and if the prices break the support level then it continues to fall down.

When the price is finally able to break the support or resistance, then it forms a new support or resistance level. The previous resistance becomes the new support level whereas the previous support level becomes the new resistance level.

| Date | R1 | R2 | R3 | S1 | S2 | S3 |
|-----------|---------|---------|---------|-----------------------|---------|---------|
| 9/1/2023 | 3359.9 | 3400.1 | 3472.4 | 3247.4 | 3175.1 | 3134.9 |
| 10/1/2023 | 3308.8 | 3331.4 | 3370.3 | 3247.3 | 3208.4 | 3185.8 |
| 11/1/2023 | 3361.75 | 3394.8 | 3440.1 | 3283.4 | 3238.1 | 3205.05 |
| 12/1/2023 | 3351.06 | 3367.53 | 3385.06 | 3317.06 | 3299.53 | 3283.06 |
| 13/1/2023 | 3400.46 | 3426.73 | 3474.36 | 3326.56 | 3278.93 | 3252.66 |
| 16/1/2023 | 3358.29 | 3382.17 | 3411.94 | <mark>33</mark> 04.64 | 3274.87 | 3250.99 |
| 17/1/2023 | 3399.8 | 3421.2 | 3460.6 | 3339 | 3299.6 | 3278.2 |
| 18/1/2023 | 3408.55 | 3427.1 | 3445.25 | 3371.85 | 3353.7 | 3335.15 |

Relative strength index

The relative strength index (RSI) is a momentum indicator that measures recent price changes as it moves between 0 and 100. The RSI provides short-term buy and sell signals and is used to track the overbought and oversold levels of an asset.

Low RSI levels, below 30, generate buy signals and indicate an oversold or undervalued condition. High RSI levels, above 70, generate sell signals and suggest that a security is overbought or overvalued. A reading of 50 denotes a neutral level or balance between bullish and bearish positions.

| Date | RSI |
|-----------|----------|
| 9/1/2023 | 53.86215 |
| 10/1/2023 | 50.05833 |
| 11/1/2023 | 54.42817 |
| 12/1/2023 | 54.99463 |
| 13/1/2023 | 58.90825 |
| 16/1/2023 | 53.82959 |

| 17/1/2023 | 58.09055 |
|-----------|----------|
| 18/1/2023 | 59.1524 |

According to the above readings, the RSI is around 50. Therefore, it denotes a neutral level between bullish and bearish positions.

Simple and Exponential moving Averages

The moving average can be used to identify buying and selling opportunities with its own merit. When the stock price trades above its average price, it means the traders are willing to buy the stock at a price higher than its average price. This means the traders are optimistic about the stock price going higher. Therefore one should look at buying opportunities.

Likewise, when the stock price trades below its average price, it means the traders are willing to sell the stock at a price lesser than its average price. This means the traders are pessimistic about the stock price movement. Therefore one should look at selling opportunities.

Rule 1) Buy (go long) when the current market price turns greater than the EMA. Once you go long, you should stay invested till the necessary sell condition is satisfied.

Rule 2) Exit the long position (square off) when the current market price turns lesser than the EMA.

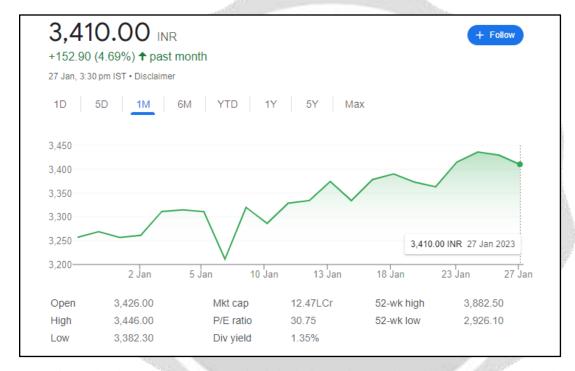
| Date | Closing prices | Simple Moving Average | | | Exponential Moving Average | | | |
|-----------|----------------|-----------------------|---------|---------|----------------------------|---------|---------|--|
| | | 5 day | 10 day | 20 day | 5 day | 10 day | 20 day | |
| | | II. | | | | | | |
| 9/1/2023 | 3319.95 | 3288.34 | 3275.00 | 3274.14 | 3285.51 | 3281.58 | 3298.43 | |
| 10/1/2023 | 3286.4 | 3292.50 | 3278.05 | 3274.13 | 3285.81 | 3282.46 | 3297.29 | |
| 11/1/2023 | 3328.7 | 3295.39 | 3284.34 | 3273.97 | 3300.11 | 3290.86 | 3300.28 | |
| 12/1/2023 | 3334.35 | 3298.68 | 3291.36 | 3272.50 | 3311.52 | 3298.77 | 3303.52 | |
| 13/1/2023 | 3374.55 | 3309.25 | 3300.98 | 3275.80 | 3332.53 | 3312.55 | 3310.29 | |
| 16/1/2023 | 3334.05 | 3329.67 | 3308.01 | 3280.27 | 3333.04 | 3316.46 | 3312.55 | |
| 17/1/2023 | 3378.4 | 3339.41 | 3318.64 | 3288.67 | 3348.16 | 3327.72 | 3318.82 | |
| 18/1/2023 | 3390 | 3356.68 | 3325.79 | 3295.62 | 3362.11 | 3339.04 | 3325.60 | |

According to the above data, the market prices for all the days is greater than the 20 days EMA. So it implies that the stock price is bullish and it is advised to buy the shares.

Historical Share prices

| Date | Open | High | Low | Close |
|----------|--------|--------|--------|--------|
| 9/1/2023 | 3243.9 | 3327.8 | 3215.3 | 3319.7 |

| 10/1/2023 | 3290 | 3292.5 | 3231 | 3286.2 |
|-----------|--------|---------|---------|--------|
| 11/1/2023 | 3290.1 | 3349.5 | 3271.15 | 3328.7 |
| 12/1/2023 | 3333 | 3350 | 3316 | 3334.6 |
| 13/1/2023 | 3349 | 3379.1 | 3305.2 | 3374.2 |
| 16/1/2023 | 3320 | 3352.4 | 3298.75 | 3334.4 |
| 17/1/2023 | 3330 | 3381.8 | 3321 | 3378.4 |
| 18/1/2023 | 3380 | 3408.95 | 3372.25 | 3390 |



According to the above data, TCS share price is in the increasing trend. So, it is advised to buy the shares as it shows a bullish trend.

Tech Mahindra

Tech Mahindra is an Indian multinational information technology services and consulting company. Part of the Mahindra Group, the company is headquartered in Pune and has its registered office in Mumbai. Tech Mahindra is a US \$6.0 billion company with over 158,000 employees across 90 countries. The company was ranked #5 in India's IT firms and overall #47 on Fortune India 500 list for 2019. On 25 June 2013, Tech Mahindra announced the completion of a merger with Mahindra Satyam. Tech Mahindra has 1262 active clients as of June 2022. Tech Mahindra Limited has entered into a share subscription agreement to acquire 26% equity shares in Upendra Singh Multi Transmission Private Limited. The acquisition would enable the Company to procure 1.5 MW of Solar Energy for its captive consumption at its facilities located in Noida, UP.

Acquisition of Satyam Computer Services Ltd

After the Satyam scandal of 2008-09 Tech Mahindra bid for Satyam Computer Services, and emerged as a top bidder with an offer of INR 58.90 a share for a 31 percent stake in the company, beating a strong rival Larsen &

Toubro. After evaluating the bids, the government-appointed board of Satyam Computer announced on 13 April 2009: "its Board of Directors has selected Venturbay Consultants Private Limited, a subsidiary controlled by Tech Mahindra Limited as the highest bidder to acquire a controlling stake in the Company, subject to the approval of the Hon'ble Company Law Board."

Merger with Mahindra Satyam

Tech Mahindra announced its merger with Mahindra Satyam on March 21, 2012, after getting approval of the two company boards to create an IT company worth US\$2.5 billion. The two firms had received the go-ahead for the merger from the Bombay Stock Exchange and the National Stock Exchange. On June 11, 2013, Andhra Pradesh High Court gave its approval for merging Mahindra Satyam with Tech Mahindra, after getting approval from the Bombay high court. Vineet Nayyar said that technical approvals from the Registrar of Companies in Andhra Pradesh and Maharashtra are required which will be done in two to four weeks, and within eight weeks, the new merged entity would be in place. The new organization would be led by Anand Mahindra as Chairman, Vineet Nayyar as Vice Chairman, and C. P. Gurnani as the CEO and Managing Director. On June 25, 2013, Tech Mahindra announced the completion of its merger with Mahindra Satyam to create the nation's fifth largest software services company with a turnover of US\$2.7 billion. Tech Mahindra got the approval from the registrar of companies for the merger at 11:45 pm on June 24, 2013. July 5, 2013 has been determined as the record date on which the Satyam Computer Services ('Mahindra Satyam') shares will be swapped for Tech Mahindra shares under the approved scheme. Mahindra Satyam (Satyam Computer Services), was suspended from trading with effect from July 4, 2013, following the merger. Tech Mahindra completed a share swap and allocated its shares to the shareholders of Satyam Computer Services on July 12, 2013. The stock exchanges have accorded their approval for trading the new shares with effect from July 12, 2013 onwards. Tech Mahindra posted net profit of INR 686 crore for the first quarter ended June 30, 2013, up 27% compared to the corresponding quarter the previous year.

Resistance and Support

| Туре | S4 | S3 | S2 | S1 | Pivot Point | R1 | R2 | R3 | R4 |
|-----------|-------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|-------------|
| Standard | - | 990.8 0 | 1004 .60 | 1020. 35 | 1034. 15 | 1049. 90 | 1063. 70 | 1079. 45 | 1 |
| Camarilla | 1019. 85 | 1027. 97 | 1030 .68 | 1033. 39 | 1034. 15 | 1038. 81 | 1041. 52 | 1044. 23 | 1052.3 5 |
| Fibonacci | - | 1004. 60 | 1015 .89 | 1022. 86 | 1034. 15 | 1045. 44 | 1052. 41 | 1063. 70 | - |
| Woodie's | - | - | 1005 .09 | 1021. 32 | 1034. 64 | 1050. 87 | 1064. 19 | - | - |
| Demark | - | - | - | 1027. 25 | - | 1056. 80 | - | - | - |

Chart of 10 days price

Date: 30-Jan-23

Open: 1030.10

High: 1047.95

Low: 1018.40

Close: 1036.10

| DATE | OPEN | HIGH | LOW | CLOSE | SHARES | TRADES |
|------------|---------|---------|---------|---------|--------|--------|
| 18-01-2023 | 1049.75 | 1051.10 | 1044.00 | 1048.25 | 29645 | 1877 |
| 17-01-2023 | 1035.00 | 1048.70 | 1030.00 | 1045.70 | 127251 | 7247 |
| 16-01-2023 | 1011.95 | 1036.15 | 1003.90 | 1034.60 | 68411 | 4258 |
| 13-01-2023 | 1009.65 | 1009.65 | 986.30 | 1003.10 | 110077 | 8412 |
| 12-01-2023 | 1006.55 | 1014.00 | 997.40 | 1002.05 | 41108 | 4527 |
| 10-01-2023 | 1015.00 | 1015.05 | 999.10 | 1002.65 | 112509 | 6838 |
| 09-01-2023 | 993.20 | 1020.50 | 993.20 | 1015.35 | 131989 | 6728 |
| 06-01-2023 | 1010.00 | 1010.20 | 985.00 | 986.50 | 81645 | 5825 |
| 05-01-2023 | 1028.85 | 1028.85 | 1005.00 | 1010.80 | 96578 | 2126 |
| 03-01-2023 | 1009.50 | 1024.70 | 1008.10 | 1024.05 | 99537 | 3550 |

Conclusion

The IT sector is one of the most dynamic and rapidly evolving sectors in the share market. It comprises companies that develop and provide technology products and services, such as software, hardware, telecommunications, and ecommerce.

However, investing in the IT sector also carries some risks, such as high volatility, fierce competition, and regulatory challenges. Moreover, the performance of individual companies within the IT sector can vary greatly depending on their business models, products and services, financial health, and management strategies.

Therefore, before investing in the IT sector in the share market, it is important to conduct thorough research, analyze market trends and competitors, assess the financial health of individual companies, and consider the risk-reward

tradeoff. It is also recommended to diversify investments across different sectors and asset classes to reduce overall portfolio risk.

Technical analysis can also be used to identify entry and exit points for trades, manage risk, and set stop-loss orders. However, critics of technical analysis argue that it is often based on subjective interpretations of data and relies on past performance, which may not be indicative of future market behavior. They also argue that technical analysis may not account for fundamental factors that can influence market trends, such as economic and political events, regulatory changes, and company performance.

Therefore, it is important to approach technical analysis with caution and use it in conjunction with other forms of analysis, such as fundamental analysis and market research. It is also recommended to develop a clear investment strategy and risk management plan before making any investment decisions based on technical analysis or any other form of analysis.

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