

**TECHNICAL ANALYSIS OF MOVING AVERAGES METHOD AT HDFC SECURITIES LTD****Panthakani Swathika <sup>[1]</sup>****MBA Student****Dr Chandra Sekhar Pattnaik <sup>[2]</sup>****PROFESSOR****<sup>[1,2]</sup>MASTER OF BUSINESS ADMINISTRATION****<sup>[1,2]</sup>Megha Institute of Engineering and Technology for Women, Sy. No. 7, Edulabad Road, Edulabad, Ghatkesar, Telangana.****ABSTRACT**

This study presents a comprehensive analysis of Wipro, TCS (Tata Consultancy Services), Tech Mahindra, HCL Technologies, and Infosys using Simple Moving Average (SMA) techniques. The findings reveal varied trends across these companies, with some exhibiting stable performance while others display short-term volatility. Suggestions derived from the analysis emphasize diversification, long-term investing in stable companies, short-term trading opportunities in volatile stocks, robust risk management strategies, and the integration of fundamental analysis alongside technical indicators. The conclusion highlights investment opportunities, diversification benefits, risk management imperatives, the importance of a holistic approach, and the necessity for continuous market monitoring to adapt to changing conditions. Overall, this study provides investors and traders with valuable insights to navigate the complexities of the IT sector and make informed investment decisions aligned with their financial objectives.

**INRODUCTION****TECHNICAL ANALYSIS**

Technical analysis is a security analysis discipline for forecasting the future direction of prices through the study of past market data, primarily price and volume.

A method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

The principles of technical analysis derive from the observation of financial markets over hundreds of years. The oldest known example of technical analysis was a method developed by Comma Munchies during early 18th century which evolved into the use of candlestick techniques, and is today a main charting tool. Dow Theory is based on the collected writings of Dow Jones co-founder and Editor Charles Dow, and inspired the use and development of modern technical analysis from the end of the 19th century. Other pioneers of analysis techniques include Ralph Nelson Elliott and William Delbert Mann who developed their respective techniques in the early 20th century. Many more technical tools and theories have been developed and enhanced in recent decades, with an increasing emphasis on computer-assisted techniques.

## NEED OF THE STUDY

- The rapid evolution of the IT sector, especially in India, necessitates a thorough understanding of key players like Wipro, TCS, Tech Mahindra, HCL, and Infosys.
- Investors and stakeholders require insights into these companies' financial performance, market positioning, and growth prospects to make informed investment decisions.
- Analyzing these companies can provide valuable insights into market trends, investment opportunities, and potential risks, thereby guiding investors in portfolio management and risk mitigation.

## SCOPE OF THE STUDY

The study focuses on analyzing the financial performance and stock trends of Wipro, TCS, Tech Mahindra, HCL, and Infosys over a specified period. It includes evaluating key financial metrics, such as revenue, profit margins, earnings per share (EPS), and stock price movements. The scope extends to comparing the performance of these companies relative to industry benchmarks and identifying factors contributing to their success or challenges. It is the process of identifying trend reversals at an earlier stage to formulate the buying and selling strategy. With the help of several indicators they analyse the relationship price – volume and supply-demand for overall market and the individual stock.

## OBJECTIVES OF THE STUDY

1. To assess the financial performance and market positioning of Wipro, TCS, Tech Mahindra, HCL, and Infosys.
2. To know about various indicators and tools used in technical analysis.
3. To analyze stock price movements and identify patterns or trends that could inform investment decisions.
4. To provide recommendations for investors based on the findings of the analysis.

## RESEARCH METHODOLOGY

### RESEARCH DESIGN

Around 5 companies are chosen their average gain and average loss are calculated and technical is made

#### ❖ **Primary Data:**

The data which is collected for the first time is known as primary data. The project work won't have any such primary data.

#### ❖ **Secondary Data:**

The data which is already available for the study is known as secondary data. This project uses such data the data collected is from different sources like.

## DATA COLLECTION

The present study is based on secondary data the various source of secondary include

- ☐ Share prices of different BSE Sen sex companies.
- ☐ Information provided by Hdfc securities
- ☐ Magazines
- ☐ Websites
- ☐ nseindia.com
- ☐ www.indiabulls.com

#### **LIMITATIONS OF THE STUDY**

- ☐ The study relies on historical data, which may not accurately predict future performance or market trends.
- ☐ External factors such as macroeconomic conditions, regulatory changes, and geopolitical events could influence the findings and recommendations.
- ☐ Limited access to proprietary data or undisclosed information from the companies may restrict the depth of analysis.
- ☐ The study may not account for qualitative factors such as management quality, corporate governance practices, or technological innovation, which can significantly impact company performance.

#### **REVIEW OF LITERATURE**

A method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value, but instead use charts and other tools to identify patterns that can suggest future activity.

In finance, technical analysis is a security analysis methodology for forecasting the direction of prices through the study of past market data, primarily price and volume. Behavioral economics and quantitative analysis use many of the same tools of technical analysis, which, being an aspect of active management, stands in contradiction to much of modern portfolio theory. The efficacy of both technical and fundamental analysis is disputed by the efficient-market hypothesis which states that stock market prices are essentially unpredictable.

#### **INDUSTRY PROFILE**

Indian Stock Markets are one of the oldest in Asia. Its history dates back to nearly 200 years ago. The earliest records of security dealings in India are meager and obscure. The East India Company was the dominant institution in those days and business in its loan securities used to be transacted towards the close of the eighteenth century.

By 1830's business on corporate stocks and shares in Bank and Cotton presses took place in Bombay. Though the trading list was broader in 1839, there were only half a dozen brokers recognized by banks and merchants during 1840 and 1850.

The 1850's witnessed a rapid development of commercial enterprise and brokerage business attracted many men into the field and by 1860 the number of brokers increased into 60.

In 1860-61 the American Civil War broke out and cotton supply from United States of Europe was stopped; thus, the 'Share Mania' in India begun. The number of brokers increased to about 200 to 250. However, at the end of the American Civil War, in 1865, a

disastrous slump began (for example, Bank of Bombay Share which had touched Rs 2850 could only be sold at Rs. 87).

At the end of the American Civil War, the brokers who thrived out of Civil War in 1874, found a place in a street (now appropriately called as Dalal Street) where they would conveniently assemble and transact business. In 1887, they formally established in Bombay, the "Native Share and Stock Brokers' Association" (which is alternatively known as "The Stock Exchange"). In 1895, the Stock Exchange acquired a premise in the same street and it was inaugurated in 1899. Thus, the Stock Exchange at Bombay was consolidated.

## **COMPANY PROFILE**

### **HDFC SECURITIES**

#### **About Us**

We are one of the leading stock broking companies in India, and a subsidiary of HDFC Bank- a renowned private sector bank.

As a stock broking company, we have completed 18 years of operations, serving a diverse customer base of retail and institutional investors.

There are innumerable reasons why you should opt for our services, and here are a few of them:

#### **Your interest is our priority: -**

Your financial requirements and goals are our priority. We simplify investing for you, and provide a 360-degree view of financial planning options that suit your future goals and needs.

#### **One-stop shop for your investments:**

We offer a suite of products and services across various asset classes, such as equity, gold, debt and real estate. Be it stocks, derivatives, mutual funds, fixed deposits, NCDs, insurance, bonds, currency derivatives, we have a product that suits each of your investment needs.

**DATA ANALYSIS AND INTERPRETATION****SIMPLE MOVING AVERAGE OF WIPRO for DIFFERENT TIME PERIODS**

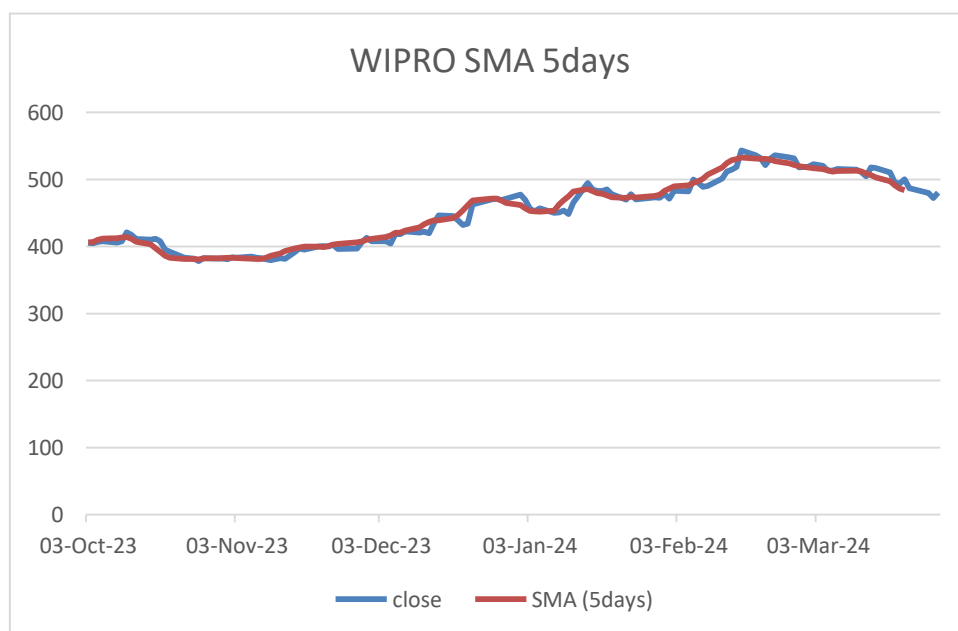
Date	close	SMA (5days)	SMA(10days)	SMA (15 days)	SMA (20 dys)
28-Mar-24	480.1				
27-Mar-24	472.3				
26-Mar-24	479.85				
22-Mar-24	487.1				
21-Mar-24	500.45	483.96			
20-Mar-24	493.5	486.64			
19-Mar-24	494.85	491.15			
18-Mar-24	510.2	497.22			
15-Mar-24	517	503.2			
14-Mar-24	517.95	506.7	495.33		
13-Mar-24	504.4	508.88	497.76		
12-Mar-24	510.85	512.08	501.615		
11-Mar-24	514.55	512.95	505.085		
7-Mar-24	515.5	512.65	507.925		
6-Mar-24	513.15	511.69	509.195	500.783	
5-Mar-24	513.3	513.47	511.175	502.997	
4-Mar-24	520.5	515.4	513.74	506.21	
2-Mar-24	522.85	517.06	515.005	509.077	
1-Mar-24	519.1	517.78	515.215	511.21	
29-Feb-24	518.6	518.87	515.28	512.42	505.305
28-Feb-24	517.7	519.75	516.61	514.033	507.185
27-Feb-24	531.45	521.94	518.67	516.473	510.143
26-Feb-24	532.9	523.95	520.505	517.987	512.795
23-Feb-24	536.15	527.36	522.57	519.263	515.248
22-Feb-24	531.05	529.85	524.36	520.137	516.778
21-Feb-24	521.4	530.59	525.17	521.27	518.173
20-Feb-24	531.95	530.69	526.315	522.677	520.028
19-Feb-24	535.95	531.3	527.625	524.103	521.315
16-Feb-24	543	532.67	530.015	525.937	522.615
15-Feb-24	518.5	530.16	530.005	526.293	522.643
14-Feb-24	514.5	528.78	529.685	526.373	523.148
13-Feb-24	511.6	524.71	527.7	525.78	523.185

12-Feb-24	501.45	517.81	524.555	524.353	522.53
9-Feb-24	490.45	507.3	519.985	522.443	521.278
8-Feb-24	488.85	501.37	515.765	520.46	520.063
7-Feb-24	495.2	497.51	513.145	518.96	519.158
6-Feb-24	499.65	495.12	509.915	516.84	518.115
5-Feb-24	482.35	491.3	504.555	513.47	516.09
2-Feb-24	483.15	489.84	498.57	509.937	514.293
1-Feb-24	471.35	486.34	493.855	505.957	511.93
31-Jan-24	478.15	482.93	490.22	503.073	509.953
30-Jan-24	472.5	477.5	486.31	499.11	507.005
29-Jan-24	473	475.63	483.465	494.913	504.01
25-Jan-24	470	473	481.42	490.047	500.703
24-Jan-24	478.05	474.34	480.34	487.35	498.053
23-Jan-24	469.9	472.69	477.81	484.377	495.478
20-Jan-24	477.95	473.78	475.64	482.133	492.778
19-Jan-24	485.05	476.19	475.91	481.04	490.233
18-Jan-24	482.65	478.72	475.86	480.52	487.215
17-Jan-24	482.4	479.59	476.965	480.09	485.41
16-Jan-24	485	482.61	477.65	479.41	483.935
15-Jan-24	494.6	485.94	479.86	479.073	483.085
12-Jan-24	465.45	482.02	479.105	477.947	481.285
11-Jan-24	448.2	475.13	476.925	475.617	479.173
10-Jan-24	453.6	469.37	474.48	474.433	477.41
9-Jan-24	450.75	462.52	472.565	472.607	475.188
8-Jan-24	450.35	453.67	469.805	471.13	472.723
5-Jan-24	456.6	451.9	466.96	470.037	471.435
4-Jan-24	452.4	452.74	463.935	468.863	469.898
3-Jan-24	455.9	453.2	461.285	467.387	469.125
2-Jan-24	469.2	456.89	459.705	467.34	468.678
1-Jan-24	477.15	462.25	457.96	467.287	468.91
29-Dec-23	471.3	465.19	458.545	466.37	468.825
28-Dec-23	469.45	468.6	460.67	465.49	468.798
27-Dec-23	470.95	471.61	462.405	464.727	468.443
26-Dec-23	470.1	471.79	464.34	463.733	468.453
22-Dec-23	462.65	468.89	465.57	461.603	467.688
21-Dec-23	434	461.43	463.31	459.507	465.135
20-Dec-23	431.95	453.93	461.265	458.423	462.6
19-Dec-23	438.7	447.48	459.545	457.43	460.415
18-Dec-23	445.25	442.51	457.15	457.063	458.428
15-Dec-23	446.55	439.29	454.09	456.81	456.025

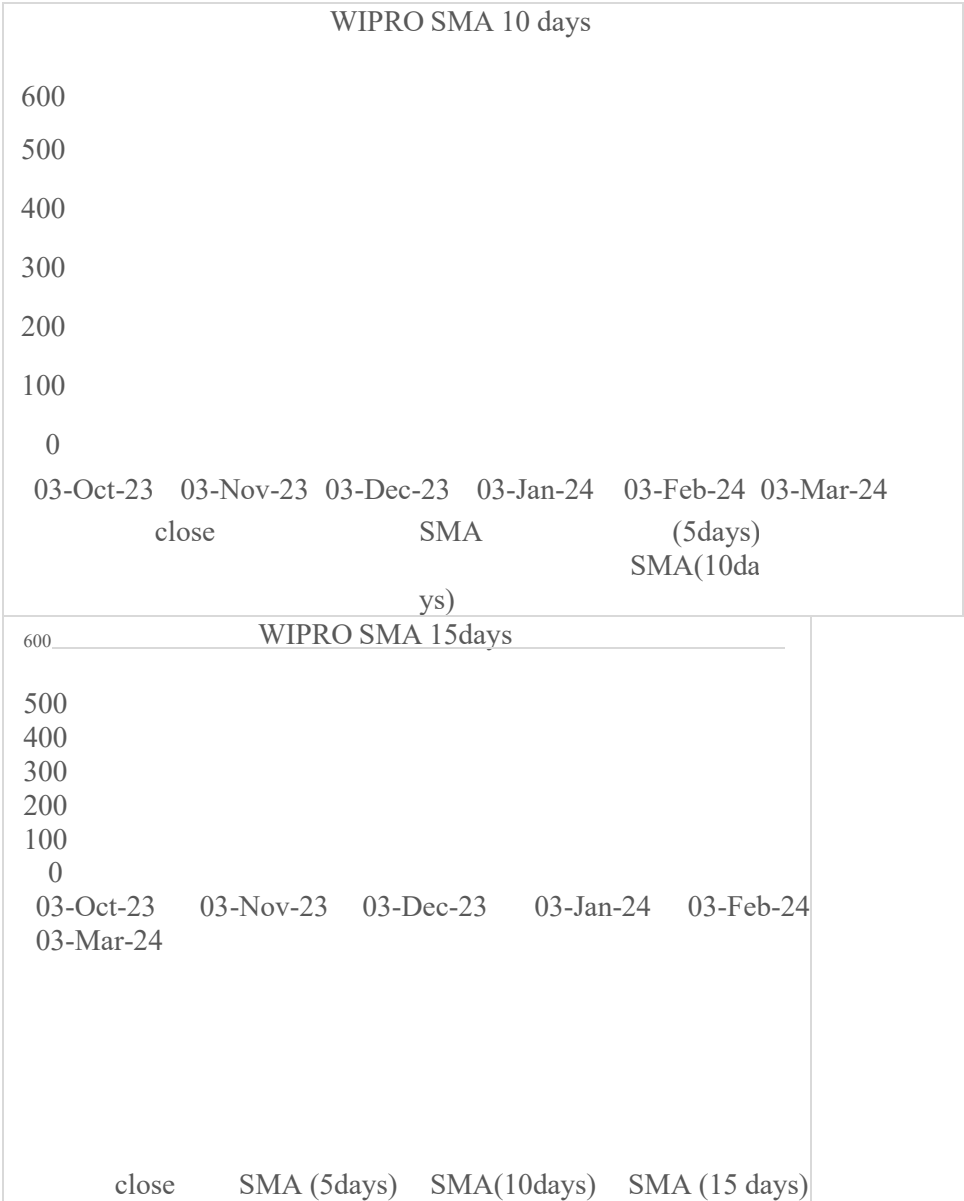
14-Dec-23	434.4	439.37	450.4	455.33	454.473
13-Dec-23	419.65	436.91	445.42	453.147	453.045
12-Dec-23	422.2	433.61	440.545	450.9	451.475
11-Dec-23	420.6	428.68	435.595	447.66	449.968
8-Dec-23	422.6	423.89	431.59	444.023	448.58
7-Dec-23	418.25	420.66	430.015	440.487	446.663
6-Dec-23	418.75	420.48	428.695	437.107	444.98
5-Dec-23	404.35	416.91	425.26	432.667	442.403
4-Dec-23	407.45	414.28	421.48	428.49	439.315
1-Dec-23	407.65	411.29	417.59	424.823	435.84
30-Nov-23	413.05	410.25	415.455	423.427	432.928
29-Nov-23	406.25	407.75	414.115	421.713	429.768
28-Nov-23	396.85	406.25	411.58	418.923	426.063
24-Nov-23	396	403.96	409.12	415.64	422.358
23-Nov-23	402.5	402.93	407.11	412.703	419.35
22-Nov-23	400.25	400.37	405.31	410.427	417.663
21-Nov-23	400.65	399.25	403.5	409.16	416.098
20-Nov-23	400.2	399.92	403.085	407.693	414.173
17-Nov-23	395.4	399.8	401.88	406.013	411.68
16-Nov-23	397.1	398.72	400.825	404.313	409.208
15-Nov-23	391.65	397	398.685	402.54	407.07
13-Nov-23	381.65	393.2	396.225	400.067	405.17
12-Nov-23	382.45	389.65	394.785	398.607	403.183
10-Nov-23	379.3	386.43	393.115	396.73	401.118
9-Nov-23	380.85	383.18	390.95	394.943	399.03
8-Nov-23	382.2	381.29	389.145	392.887	397.228
7-Nov-23	383.3	381.62	387.41	391.357	395.455
6-Nov-23	384.65	382.06	385.855	390.543	394.47
3-Nov-23	383.55	382.91	384.67	389.713	393.275
2-Nov-23	383.65	383.47	383.325	388.457	392.075
1-Nov-23	380.95	383.22	382.255	387.17	390.47
31-Oct-23	381.8	382.92	382.27	385.913	389.248
30-Oct-23	382	382.39	382.225	384.7	388.505
27-Oct-23	382.35	382.15	382.53	383.83	387.823
26-Oct-23	378.25	381.07	382.27	382.573	386.61
25-Oct-23	381.85	381.25	382.235	381.92	385.69
23-Oct-23	383.15	381.52	382.22	382.02	384.815
20-Oct-23	391.85	383.49	382.94	382.647	384.398
19-Oct-23	395.3	386.08	384.115	383.713	384.393
18-Oct-23	407.45	391.92	386.495	385.487	384.91

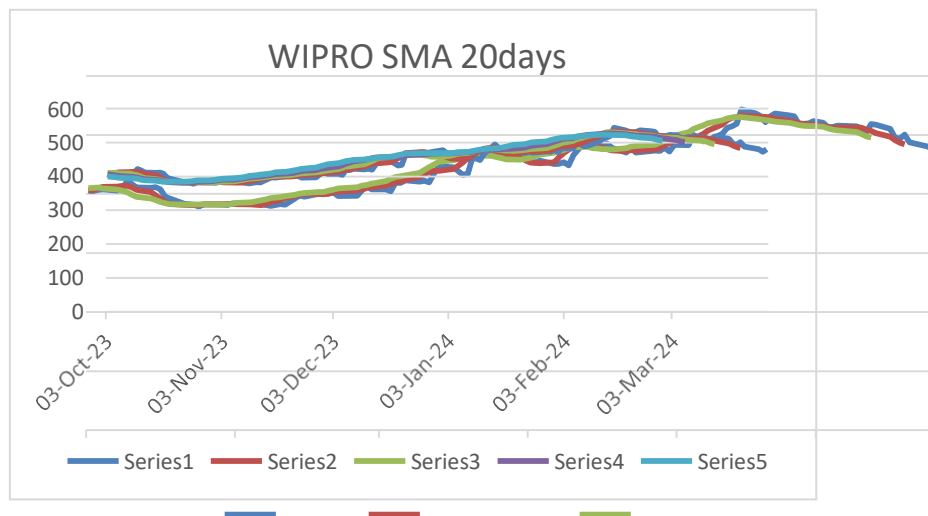
17-Oct-23	411.4	397.83	389.54	387.433	385.898
16-Oct-23	410.2	403.24	392.38	389.227	387.325
13-Oct-23	411.05	407.08	395.285	390.987	388.755
12-Oct-23	417.1	411.44	398.76	393.223	390.645
11-Oct-23	421.15	414.18	403.05	395.723	392.66
10-Oct-23	407.75	413.45	405.64	397.51	393.938
9-Oct-23	405.6	412.53	407.885	399.097	395.053
6-Oct-23	407.85	411.89	409.485	400.82	396.213
5-Oct-23	406.8	409.83	410.635	402.45	397.375
4-Oct-23	404.9	406.58	410.38	404.227	398.438
3-Oct-23	405.45	406.12	409.785	405.8	399.663

Graphical representation









### INTERPRETATION:

When compared to moving average method the expected value is less than closing price on (522.06&517.06),(536.15&527.36),(485.05&476.19) .Hence the investor gets benefits in 5 days.

When compared to moving average method the expected value is greater than closing price on (510.85&512.08),(521.4&530.59),(422.2&433.61) .Hence the investor gets losses in 5 days.

When compared to moving average method the expected value is less than closing price on (513.15&511.69),(499.65&495.12), (413.05,410.25) .Hence the investor gets benefits in 10 days.

When compared to moving average method the expected value is greater than closing price on (434&463.31), (446.55,454.09), (418.75&428.695) .Hence the investor gets losses in 10 days.

When compared to moving average method the expected value is less than closing price on (469.2&467.34), (477.15&467.34), (462.65&461.603) .Hence the investor gets benefits in 15 days.

When compared to moving average method the expected value is greater than closing price on (445.25&457.063), (446.55&456.81), (420.6&447.66) .Hence the investor gets losses in 15 days.

When compared to moving average method the expected value is less than closing price on (469.2&468.78) (477.15&468.798), (469.45&468.798) .Hence the investor gets benefits in 20 days.

When compared to moving average method the expected value is greater than closing price on (462.65&467.688), (446.55&456.025), (422.6&448.58) .Hence the investor gets losses in 20 days.

## FINDINGS

Certainly! Here are the findings based on the Simple Moving Average (SMA) analysis for Wipro, TCS, Tech Mahindra, HCL, and Infosys:

### **Wipro:**

The SMA analysis suggests a mixed picture for Wipro.

Short-term SMAs (5 days) may indicate short-term price fluctuations, providing potential trading opportunities.

Medium-term SMAs (10 days) can help confirm trends and filter out short-term noise.

Long-term SMAs (15 and 20 days) would provide insights into the broader trend, aiding investors with longer time horizons.

### **TCS (Tata Consultancy Services):**

TCS shows a relatively stable and consistent trend based on the SMA analysis.

Short-term SMAs (5 days) may help identify short-term fluctuations, but longer-term trends are more reliable.

Medium-term SMAs (10 days) confirm the direction of the trend observed in the short term.

Long-term SMAs (15 and 20 days) would provide further confirmation of the overall trend and potential reversal points.

## SUGGESTIONS

Certainly! Here are some suggestions based on the findings for Wipro, TCS, Tech Mahindra, HCL, and Infosys:

- Consider diversifying your investment portfolio across these companies to spread risk. Each company operates in the IT sector but may have different revenue streams, client bases, and geographic exposures, which can provide diversification benefits.
- For investors with a long-term horizon, focus on companies with stable trends and consistent performance over time, such as TCS and Infosys. These companies have shown relatively stable trends in their SMA analysis, indicating resilience and potential for long-term growth.
- For traders interested in short-term opportunities, companies like Wipro and Tech Mahindra, which exhibit more short-term volatility in their SMA analysis, may present trading opportunities. Monitor short-term SMAs (5 days) for potential entry and exit points.
- Implement robust risk management strategies, such as setting stop-loss orders and position sizing, to protect your capital, especially when trading volatile stocks like Tech Mahindra and Wipro.
- Combine SMA analysis with fundamental analysis to gain a comprehensive understanding of each company's financial health, competitive position, growth prospects, and valuation metrics. This holistic approach can help you make well-informed investment decisions.
- Continuously monitor market trends, industry news, and macroeconomic factors that may impact the IT sector as a whole and individual companies specifically.

Stay updated on quarterly earnings reports, client wins, and management guidance for these companies.

## CONCLUSION

In conclusion, the analysis of Wipro, TCS, Tech Mahindra, HCL, and Infosys provides valuable insights for investors and traders alike.

- Each company offers unique investment opportunities based on their performance, volatility, and growth prospects. Long-term investors may find stability and growth potential in TCS and Infosys, while short-term traders may capitalize on the volatility of Wipro and Tech Mahindra.
- Diversifying across these companies can help spread risk and capture opportunities in the dynamic IT sector. Investors can leverage the strengths and mitigate the weaknesses of each company to build a well-balanced portfolio.
- Given the inherent risks in investing, it's crucial to implement robust risk management strategies. This includes setting clear investment goals, maintaining diversified portfolios, and employing risk mitigation techniques such as stop-loss orders.
- Combining technical analysis like SMA with fundamental analysis provides a comprehensive understanding of each company's financial health, competitive positioning, and growth prospects. This holistic approach enables investors to make well-informed decisions aligned with their investment objectives.
- The investment landscape is dynamic, and market conditions can change rapidly.

Therefore, it's essential for investors to stay vigilant, continuously monitor market trends, and adjust their strategies accordingly to capitalize on emerging opportunities and mitigate risks.

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