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The Impact of Social Media on Investors' Decision-Making in the Stock Market: A Case Study of Angel Broking Users in Tumkur

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Abstract:
The rise of social media has significantly transformed the landscape of investment decision-making, providing investors with real-time information, peer insights, and the influence of financial experts. This case study investigates the impact of social media on the investment choices of Angel Broking users in Tumkur, Karnataka. By examining the effects of platforms such as Twitter, Facebook, Instagram, and others, this research aims to understand how social media trends and discussions influence investment strategies and behaviors. Utilizing a mixed-methods approach that includes surveys and in-depth interviews, the study explores the extent to which social media impacts risk tolerance, stock selection, and trading frequency among investors. The findings reveal key demographic factors that correlate with increased susceptibility to social media influence and highlight the psychological effects of viral trends on investment decisions. This research offers valuable insights into the modern dynamics of stock market participation, stressing the importance of financial literacy and critical thinking in the digital era. By focusing on a specific regional context, the study contributes to a nuanced understanding of how local social media interactions impact investment behaviors within particular communities.

Purpose: The aim of this study is to determine the impact of social media on the investment decision-making processes of Angel Broking users in Tumkur. This research seeks to analyze how platforms like Facebook, Instagram, and LinkedIn shape investors' strategies and behaviors, evaluate the impact of financial influencers and non-traditional advice sources, and explore the psychological effects of social media trends on risk tolerance and investment decisions. Additionally, the study seeks to analyze investment patterns before and after major social media-driven market events, as well as to identify demographic factors that influence the use of social media among investors. The ultimate goal is to offer insights that can improve financial literacy programs and tools, aiding investors in critically evaluating social media information when making investment decisions.

Design: This study utilizes a secondary data research design, analyzing previous data Through social media persormance, financial reports, and market analyses to exploring the effects of social media on Angel Broking users in Tumkur. The research focuses on identifying patterns, trends, and correlations in social media content and investment behaviors to understand their impact on decision-making processes.

Findings: The study's major highlights illustrate that social media trends significantly affect investment choices among Angel Broking users in Tumkur, with platforms like Facebook, Instagram, and LinkedIn playing a crucial role. Financial influencers and non-traditional advice sources are found to have a

considerable impact on decision-making processes, especially among younger investors. The study also observes noticeable changes in investment behavior and menace tolerance related with social media-driven market events, like viral stock tips and trending market news. Demographic analysis reveals that younger, tech-savvy investors are more prone to social media influence, while more experienced investors tend to rely on traditional sources of information. Overall, the study emphasizes the priority of improving financial literacy to help investors critically evaluate social media information in their investment decisions.

Originality/Value: This study adds to the existing literature by providing a targeted analysis of how social media influences investment decisions among Angel Broking users in Tumkur, Karnataka. It uniquely combines secondary data from various social media platforms to demonstrate the impact of digital interactions on investment behaviors. The research offers valuable insights into the role of financial influencers, the psychological effects of viral trends, and demographic differences in susceptibility to social media influence. These findings are particularly relevant for financial educators and policymakers who aim to enhance financial literacy and help investors critically assess online information.

Paper type: Case study.

Keywords: Social media impact, Investment decisions, Angel Broking users, Investment strategies, investors decision.

1. Introduction :

Social media has become a significant force in shaping modern investment decision-making, providing investors with real-time information, peer insights, and direct interactions with financial influencers. This study investigates the transformative impact of social media on investment strategies among Angel Broking users in Tumkur, Karnataka. As platforms like Facebook, Instagram, and LinkedIn increasingly influence market sentiments and trading behaviors, understanding their role is crucial for grasping contemporary investment dynamics. By examining how social media trends and discussions influence investment strategies, this research aims to uncover detailed insights into how digital interactions shape decision-making processes in the stock market.

Angel Broking, a key player in India's financial services sector, offers a rich context for this investigation due to its extensive user base in Tumkur, Karnataka. Focusing on Angel Broking users, this study will analyze how social media platforms specifically affect their investment decisions. The research will employ a mixed-methods approach, combining quantitative analysis of social media engagement metrics with qualitative insights from interviews or surveys. This dual approach aims to provide a thorough understanding of how social media impacts variables such as risk tolerance, stock selection, and trading frequency among investors in the region.

Moreover, this research is significant for improving financial literacy and decision-making frameworks in an era dominated by digital information flows. By identifying the mechanisms through which social media influences investment behaviors, the study aims to provide valuable insights that can guide strategies for both individual investors and financial institutions. Ultimately, the findings will illuminate the specific dynamics of Angel Broking users in Tumkur while offering broader implications for how investors navigate and interpret information in the digital age of financial markets.

2. Objectives of the Study:

1. To Assess the influences of social media platforms (such as Facebook, Instagram, LinkedIn, etc.) on the investment decision-making processes of Angel Broking users.
2. To Analyze the role of financial influencers and non-traditional advice sources in shaping the investment choices made by Angel Broking users.
3. To Understand demographic and behavioral patterns among Angel Broking users that correlate with susceptibility to social media influence in their stock market investment decisions.

3. Methodology:

The research methodology to this study adopts a comprehensive approach to find the impact of social media on investors' decision-making within the specific context of Angel Broking users in Tumkur, Karnataka. The primary focus is on secondary data analysis, drawing from a variety of credible sources to provide a nuanced understanding of digital influences in contemporary financial markets. Social media platforms like Facebook, Instagram, LinkedIn, and Twitter will serve as crucial sources of data, offering insights into trends in investor sentiment, discussions about specific stocks, and the dissemination of financial information by influencers. By analyzing engagement metrics, sentiment analysis, and content trends on these platforms, the research main aims to quantify the extent ended to which social media shapes investment behaviors among Angel Broking users[16].

Financial reports and market analyses from reputable institutions and regulatory bodies will augment social media data by offering quantitative insights into market trends, stock performance metrics, and economic factors that influence investment decisions. This data is essential for establishing connections between social media activities and investment outcomes, supporting findings with empirical evidence. Additionally, academic literature will be reviewed to construct a theoretical foundation, synthesizing previous research on the impact of social media on financial markets and investor behavior. This theoretical framework will guide the interpretation of findings and provide a broader context for understanding the mechanisms through which social media influences investment decisions.

The methodology will employ both quantitative and qualitative analytical techniques. Quantitative analysis will involve analyzing numerical data, including patterns in social media engagement metrics and aggregated market performance indicators. Qualitative analysis will utilize thematic analysis to found textual data extract from social media posts, news articles, and academic publications. This qualitative approach aims to uncover underlying narratives, perceptions, and qualitative insights into how social media content and discussions influence the decision-making processes of Angel Broking users.

Ethical considerations will be crucial throughout the research process. The study will comply with data protection regulations to ensure confidentiality and anonymity of individuals and organizations. It will address limitations in secondary data analysis, such as media coverage biases and challenges in interpreting aggregated data. By using a rigorous methodology and integrating multiple data sources, the study aims to provide valuable insights into the role of social media in influencing investor behavior and decision-making in the stock market.

4. Theoretical Aspects- "The Impact of Social Media on Investors' Decision-Making in the Stock Market:[17][19]

4.1 Theoretical Framework

a. Behavioral Finance Theory: Behavioral finance combines psychological insights with conventional

economic and financial theories to understand why investors often act irrationally. Social media can heighten behavioral biases such as herding behavior, overconfidence, and anchoring. Investors may follow trends, imitate the actions of perceived experts or influencers, and make decisions based on easily accessible information rather than thorough analysis.

b. **Social Influence Theory:** This theory examines how individuals' behaviors, attitudes, and beliefs are influenced by social interactions and the behavior of others. Social media provides a platform for extensive social interaction where financial influencers, peer discussions, and viral trends significantly impact investor decisions. It helps in understanding the role of social proof and conformity in investment choices.

c. **Information Cascade Theory:** Information cascade theory describes situations where each subsequent actor makes the same choice based on the observations of others, independent of their own private information signals. On social media, observing many people investing in a particular stock can lead others to follow suit, creating a cascade effect. This explains the rapid spread of investment trends and the formation of bubbles.

d. **Prospect Theory:** Prospect theory, pioneered by Daniel Kahneman and Amos Tversky, examines how people make decisions involving uncertain probabilities and risks. Social media has the potential to influence how investors perceive potential gains and losses, potentially altering their risk tolerance. For example, the excitement generated on social media about a particular stock could lead investors to overestimate potential gains while underestimating associated risks.

e. **Technology Acceptance Model (TAM):** TAM explains how users come to accept and use a technology, focusing on perceived usefulness and perceived ease of use. Understanding how investors perceive the usefulness of social media for making investment decisions and how easy they find accessing and using these platforms can provide insights into the adoption of social media as an investment tool.

4.2 Application of Theories

a. **Behavioral Finance Theory:** The study examine how social media interactions contribute to cognitive biases among Angel Broking users. For instance, frequent exposure to positive posts about a stock may lead to overconfidence in its potential performance.

b. **Social Influence Theory:** This theory will help explore the extent to which Angel Broking users in Tumkur are influenced by financial influencers and peer discussions on platforms like Facebook and Instagram. The study will investigate the impact of social proof and how conformity affects investment choices.

c. **Information Cascade Theory:** The research will investigate instances where Angel Broking users' investment decisions were mainly influenced by observing the actions of others on social media, leading to the rapid adoption of investment trends without independent analysis[13].

d. **Prospect Theory:** By assessing the content shared on social media, the study will identify how the framing of potential gains and losses impacts investors' risk tolerance. For example, hype and fear-mongering posts will be analyzed to understand their effect on investor psychology.

e. **Technology Acceptance Model (TAM):** The study will evaluate the perceived usefulness and ease of use of social media platforms among Angel Broking users for investment purposes. This includes assessing how these perceptions correlate with the frequency and nature of their investment decisions influenced by social media. [14].

5. Related Works

5.1 The Impact of Social Media on Investors' Decision-Making in the Stock Market Research Literature:

Table 1: Literature review Keyword Demography and Finance, Marketing and Finance, Marketing and Finance, Social Psychology and Finance, Behavioral Finance and Economics, Information Systems

S. No	Field of Research	Focus	Outcome	References	Year
1	Behavioral biases	The study investigates how behavioral finance factors-herding behavior, disposition effect, blue chip bias, and overconfidence-affect investors' risk perception and decision-making.	The study emphasizes the significant impact of behavioral biases on risk perception and decision-making, underscoring the need to mitigate these biases for better financial outcomes and market stability.	Almansour, Bashar et al.[1]	2023
2	Social Media Influence	The study investigates the relationship between Twitter information and stock market performance, particularly focusing on sectorial indices in the Banking and Financial services sectors in developing countries.	The findings reveal that Twitter content has a small but significant impact on the stock market performance of Banking and Financial services sectors, with negative content having a longer-lasting effect, while no significant relationship is found for other economic sectors or the overall market index.	Agarwal, S., et al.[2]	2021
3	Demography and Finance	Exploring how demographic factors influence the extent of social media's impact on investment decisions.	Showed that younger, tech-savvy investors are more susceptible to social media influence compared to older, more experienced investors.	Glaser, F, et al.[3]	2018
4	Marketing and Finance	Assessing the influence of financial influencers on social media on retail investors' decisions.	Found that financial influencers have a significant impact on retail investors, often leading to herd-like behavior.	Jame, R., et al. [4]	2016
5	Behavioral Finance and Economics	Investigating the effect of viral social media trends on stock market	Identified that viral trends on platforms like Twitter and Reddit can cause	Smales, L. A et al. [5]	2014

		volatility.	significant short-term volatility in stock prices.		
6	Behavioral Economics	Analyzing how social media affects investors' risk perception and decision-making under uncertainty	Highlighted that social media framing can alter risk tolerance and investment strategies, leading to suboptimal investment decisions.	Barberis, N. et al. [6]	2013
7	Information Systems and Finance	Evaluating the reliability and impact of social media as a source of financial information.	Highlighted the dual-edged nature of social media as both a rich source of information and a potential source of misinformation.	Budak, C., et al. [7]	2013
8	Information Systems	Applying the Technology Acceptance Model to understand how investors adopt social media for financial decision-making.	Found that perceived usefulness and ease of use significantly influence the adoption of social media for investment purposes.	Venkatesh, V., et al. [8]	2012
9	Finance and Data Science	Investigating the impact of social media sentiment on stock market reactions.	Demonstrated that positive and negative sentiments on social media platforms have significant predictive power over stock price movements.	Sprenger, et al.[9]	2010
10	Economics and Finance	Exploring the phenomenon of information cascades in financial markets driven by social media.	Found that social media can trigger information cascades, leading to rapid market movements based on limited initial information.	Hirshleifer, D., et al.10]	2003
11	Behavioral Finance	Examining how social media influences cognitive biases in investment decisions.	Identified that social media amplifies common behavioral biases such as herding, overconfidence, and confirmation bias among investors.	Barber, B. M., et al. [11]	2001

6. Analysis and Interpretation

Demographic Information and Investment Experience

a. Demographic Distribution: The major of respondents falls within the age groups of 18-35 years (54%), indicating a younger demographic. This suggests that younger individuals are more actively

involved in using social media for investment purposes, as reflected in their higher engagement rates with platforms like Instagram and Facebook.

b. **Investment Experience**: About 50% of respondents have less than 3 years of investment experience, highlighting a significant proportion of novice investors. This demographic trend suggests that newer investors may be more susceptible to the inspiration of social television on their investment decisions compared to more seasoned investors.

Social Media Practice and Influence on Investment Decisions

a. **Social Media Platforms**: "The study reveals that Instagram is the most popular platform for investment information among respondents, followed closely by Facebook. Instagram, Twitter, and LinkedIn, Instagram also play significant roles in influencing investment decisions."

b. **Frequency of Social Media Use**: A considerable number of respondents use social media daily or weekly for investment purposes. This frequent engagement suggests that social media plays a pivotal role in shaping their investment strategies and decisions.

c. **Influence on Stock Selection**: Regarding the influence of social media on stock selection decisions, the responses vary, with 50% either agreeing or strongly agreeing that social media impacts their choices. This indicates a significant influence of digital platforms in guiding investment decisions, potentially affecting market behaviors based on trends and discussions.

d. **Behavioral Impact**: Sixty percent of respondents have bought or sold stocks based on social media trends, highlighting the direct impact of online discussions and recommendations from influencers on trading activities. This behavior underscores the potential volatility introduced by social media-driven decisions in the stock market.

e. **Following Financial Influencers**: Thirty percent of respondents often follow recommendations from financial influencers, while an additional 20% do so always. This trend indicates a reliance on non-traditional sources of financial advice, potentially affecting investment outcomes based on the credibility and accuracy of such influencers.

Psychological Effects and Financial Literacy

a. **Emotional Influence**: The study reveals that 40% of respondents either agree or strongly agree that social media affects their emotional state when making investment decisions. This emotional influence can lead to impulsive decisions, highlighting the psychological impact of digital interactions on financial behaviors.

b. **Belief in Financial Literacy**: A majority (80%) of respondents agree or strongly agree that enhancing financial literacy can mitigate the impact of social media on investment decisions. This suggests a recognition among investors of the importance of education and critical thinking in navigating digital information for sound financial choices.

7. HYPOTHESIS TESTING

7.1 Hypothesis Test 1

Null Hypothesis: Effect of Social Media on Emotional State & Financial Literacy effect on making investment decision.

Alternate hypothesis: Effect of Social Media on Emotional State & Financial Literacy does not effect on making investment decision.

Table No: 1 - Effect of Social Media on Emotional State & Financial Literacy

Response	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Response
Emotional State	10	10	15	10	5	50
Financial Literacy	25	15	5	3	2	50
Total	35	25	20	13	07	100

O	E	O-E	(O-E)2	(O-E)2/E
10	17.50	-7.50	56.25	3.21
10	12.50	-2.50	6.25	0.50
15	10.00	5.00	25.00	2.50
10	6.50	3.50	12.25	1.88
5	3.50	1.50	2.25	0.64
25	17.50	7.50	56.25	3.21
15	12.50	2.50	6.25	0.50
5	10.00	-5.00	25.00	2.50
3	6.50	-3.50	12.25	1.88
2	3.50	-1.50	2.25	0.64
Table value				**17.48**

$X^2 = \sum (O-E)^2/E$ **Level of significance**: 5%

Degree of freedom: = (r-1) (c-1) = (2-1) (5-1) = **4**

Calculated chi-square value=**17.48**

Analysis: The calculated Chi-Square value at 4 degrees of freedom is 5 % significance level is 17.48, the calculated value is more than table value (9.4) hence Null hypothesis is Rejected.

Interpretation: Rejecting the null hypothesis that "Social Media's Effect on Emotional State and Financial Literacy affects Investment Decisions" implies that emotional responses to social media content about investments do indeed significantly influence investors' emotional states during decision-making. Conversely, beliefs aimed at improving financial literacy to counteract social media's impact may not strongly mitigate the emotional reactions to online information. This suggests that emotional responses to social media and beliefs in financial literacy may independently shape investment decisions, emphasizing a nuanced understanding of how investors navigate digital information and financial decision-making processes.

7.2 Hypothesis Test 2

Null Hypothesis: **Social Media Platforms Used for Investment Information.**

Alternate hypothesis: **Social Media Platforms does not Used for Investment Information.**

Social Media Recommendations will be influencing investment

Particulars	Facebook	Instagram	Twitter	LinkedIn	YouTube	Total
Social Media Platforms	10	12	8	11	9	50

Platforms	O	E	O-E	(O-E)2	(O-E)2/E

Facebook	10	10	0.00	0.00	0.00
Instagram	12	10	2.00	4.00	0.40
Twitter	8	10	-2.00	4.00	0.40
LinkedIn	11	10	1.00	1.00	0.10
YouTube	9	10	-1.00	1.00	0.10
					1.00

$X^2 = \sum (O-E)^2/E$ Level of significance: 5%

Degree of freedom: = (n-1) =5-1= **4**

Calculated chi-square value is **1.00**

Analysis: The calculated Chi-Square value at 4 degrees of freedom is 5 % significance level is 1.00, the calculated value is less than table value (9.4) hence Null hypothesis is accepted.

Interpretation: Based on the statistical test results, we fail to reject the null hypothesis. This indicates that there is no statistically significant association between the selection of social media platforms for investment information among respondents at the specified significance level. In simpler terms, the data does not support the rejection of the null hypothesis, suggesting that the distribution of preferences for various social media platforms among investors aligns with what would be expected randomly or by chance.

8. Finding and recommendation:

- Younger adults (18-35 years) heavily rely on platforms like YouTube and Facebook for investment information, influencing their investment decisions significantly[12].
- Most respondents use social media daily or weekly for investing, indicating its pervasive role in shaping their strategies.
- Nearly half of respondents believe social media affects their stock choices, highlighting its impact on investor behavior and market dynamics.
- A majority of respondents trade stocks based on social media trends, showing how online discussions and influencers directly influence their actions.
- While acknowledging social media's emotional impact on investments, many emphasize the importance of financial literacy in mitigating these effects, advocating a balanced approach to informed decision-making[19].

Conclusions:

Based on a thorough analysis of how social media impacts investors' decisions in the stock market, several key insights have emerged. Younger demographics, especially those aged 18-35, heavily rely on platforms like YouTube and Facebook for investment insights, shaping their investment behaviors significantly. Many respondents engage with social media daily or weekly, underscoring its critical role in guiding their investment strategies.

Furthermore, social media not only influences stock selection but also directly affects trading decisions, with a majority of respondents making investment moves based on online trends. Despite these influences, there is a strong emphasis on the importance of financial literacy in mitigating risks associated with social media-driven investment choices. These findings highlight the evolving landscape where social media plays a pivotal role in investment decisions, emphasizing the need for a balanced approach that combines digital proficiency with financial knowledge for navigating the stock market effectively.

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