INFLUENCE OF STREAMLINE ADVERTISING AND AI-BASED MARKETING ON CHANGING INVESTMENT ATTITUDES OF STOCK MARKET INVESTORS

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Abstract

Savings habits and investment behavior play a critical role in ensuring financial stability and managing future uncertainties. While traditional saving methods are perceived as safer, the stock market has emerged as a vital yet riskier platform influencing the global economy. However, gaps in financial literacy, risk understanding, and access to timely advice persist, limiting broader public engagement in stock market investments. The advent of technological advancements, particularly streamlined advertising and AI-driven marketing, has reshaped the stock market landscape by enhancing accessibility, improving information flow, and providing tools for better decision-making. This study specifically examines investor perceptions of content, presentation, and information flow in streamlined advertising and AI-based marketing. Additionally, the study explores the influence of these advancements on changing investment attitudes, particularly in risk factor, investment pattern, diversification, and seeking more investment opportunities. By addressing these objectives, the research provides insights into the effectiveness of technology-driven strategies in bridging critical gaps and fostering a more informed and proactive investment culture.

Keywords:- Savings, Investment, Behaviour, Advertisement, Streamline.

The concept of savings and saving habits holds significant importance for individuals navigating volatile economic conditions. Many people believe that cultivating saving habits help them address minor or major financial struggles, even during periods of economic stability.

Savings habits refer to the continuous practice of setting aside a portion of income to secure one's financial future (Halvorsen, 2011). While the concepts of savings and saving habits are interconnected, they are distinct—having savings does not necessarily indicate that saving is a habitual practice, and vice versa.

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For the majority, saving is viewed as a precautionary measure to manage future uncertainties or financial challenges, contributing to overall financial well-being. Globally, people employ various methods and instruments to allocate a portion of their income for savings. Most prefer safe and secure options; however, the global economy often relies on riskier investment platforms, such as the stock market, to address financial challenges and maintain stability. The stock market, as a dynamic and high-risk investment avenue, has become one of the key drivers of economic growth and resilience.

Background of the Research

A survey conducted by Kate Dore for CNBC reveals that teenagers remain hesitant to invest in the stock market following the GameStop frenzy. The findings suggest that while teenagers are inclined to diversify their investment patterns, they do not prioritize the stock market as their primary choice. Numerous studies highlight the existence of a significant knowledge gap among the general public and investors, which contributes to this reluctance.

A core issue is the lack of financial knowledge or education, as many individuals graduate without a sufficient understanding of personal finance, leaving their financial literacy in a poor state (Skardal &Driveklepp, 2023). Additionally, a gap in risk comprehension is prevalent, with inadequate risk literacy potentially explaining the hesitation to engage in stock market investments (Allianz, 2017).

The knowledge gap encompasses several dimensions, including poor financial literacy, limited technical expertise, inadequate access to timely advice, insufficient information flow, and restricted accessibility to reliable sources of information. These challenges have been identified in previous research (Mishra, 2018; Slaen &Skibenes, 2022; Rooij et al., 2011; Betermier et al., 2021; Calvet et al., 2009). Addressing these gaps serves as the foundation and motivation for this research article.

Review of Literatures

Personalized advertising significantly boosts investor trust and engagement by delivering content tailored to individual preferences. This strategy not only minimizes information overload but also enhances the relevance and appeal of the content to users (Chaffey & Ellis-Chadwick, 2019). Moreover, studies emphasize that clear, concise, and well-structured advertising content can effectively educate investors and bolster their confidence in making investment decisions (Aqsa & Kartini, 2015).

The presentation and flow of information are equally critical, playing a pivotal role in shaping an investor's likelihood to take action (Mehta, 2000). Another key factor is real-time access to stock market trends provided by AI-driven platforms, which enhances investor awareness and supports informed decision-making. This immediate accessibility helps investors stay updated on market dynamics, fostering a proactive approach to investments (Sabuncuoglu-Inanc et al., 2020).

Dynamic and visually engaging content shared through social media and online platforms has also proven highly effective, particularly among younger

investors. This demographic is drawn to content that is not only visually appealing but also easy to understand and interact with (Kapoor et al., 2021).

AI tools further democratize financial expertise, breaking down barriers to entry and increasing investor confidence. By providing personalized advice and alleviating concerns about risk, these technologies encourage a more positive attitude toward stock market participation (Huang & Rust, 2018). These innovations have collectively transformed investor perceptions, making financial markets more accessible, especially for those new to investing.

Statement of the Problem

The stock market has undergone significant changes due to technological advancements, particularly the emergence of artificial intelligence (AI). These developments have made stock market participation more accessible through mobile applications, streamlined advertising, and AI-based fund management systems. These technologies have not only transformed the flow of information but also introduced greater flexibility in decision-making for investors. Despite these advancements, it remains unclear whether these innovations have effectively addressed long-standing gaps in investor knowledge, financial literacy, and risk perception. This study seeks to explore the impact of technology-driven developments, particularly streamlined advertising and marketing strategies, on bridging these gaps and influencing investor attitudes.

Objectives of the study

1. To assess the investors perception about the content, presentation, amount of information flow of streamline advertising and AI based marketing.
2. To assess the effect of streamline advertising and AI based marketing on changing the investment attitude of stock market investors.

Hypotheses Development

Social networking sites and YouTube have become prominent platforms for streamlined advertising and marketing. The rapid advancements in internet technology and social media have driven significant global transformations in marketing and advertising strategies (Sabuncuoglu-Ýnanç et. al., 2020). These advancements have enabled the use of sophisticated methods to engage diverse audiences across various age groups and genders. Consequently, advertisers are increasingly focusing on the content, presentation, and volume of information in their advertisements (Aqsa & Kartini, 2015; Mehta, 2000).

Building on these observations, the study formulated a hypothesis regarding the impact of content, ideas, and information flow in streamlined advertising and AI-driven marketing efforts:

H_{01}: *Investors' perceptions of the content, presentation, and amount of information flow in streamlined advertising and AI-based marketing efforts are not statistically significant.*

Streamlined advertising and AI-driven marketing have revolutionized how

investors engage with and perceive the stock market, significantly influencing their attitudes and decision-making processes. Through AI-powered marketing, precise targeting based on user data—such as browsing history, search queries, and social media activity—has become possible. This level of personalization allows the delivery of relevant investment opportunities to potential investors, fostering greater engagement and trust (Chaffey & Ellis-Chadwick, 2019).The impact of high-quality and well-structured advertising content on investor attitudes is notable, as it provides clear, concise, and relevant information. Studies highlight that the effectiveness of such content lies in its ability to convey benefits while addressing risks, essential elements for informed investment decisions (Aqsa & Kartini, 2015; Mehta, 2000; SabuncuogluInanc et al., 2020). Platforms like Instagram and YouTube further enhance this by offering visually appealing and interactive content, particularly engaging younger investors who prioritize accessible and dynamic financial education (Kapoor et al., 2021). In this context, streamlined advertising and AI-based marketing have not only enhanced the dissemination of information but also reshaped investor attitudes by making the stock market more approachable and inclusive. Hence, study developed following hypothesis:

***H_{02}**: Streamlined advertising and AI-based marketing efforts haven't had a significant impact on changing the investment attitude of stock market investors.*

Research and Sampling Design

The study adopted a mixed-methods research design and mixed sampling method (purposive and random selection of valid questionnaire), incorporating both qualitative and quantitative data. Secondary data were sourced from published journals available on platforms such as Shodhganga, Library Genesis, British Ethos Library, and journals published on the CSR platform. Primary data were collected from a diverse group of respondents, including private sector employees (IT professionals from Technopark, Trivandrum), government employees (from the Secretariat in Kerala), teaching professionals from Kerala University, and business persons located in Thiruvananthapuram district, Kerala. To determine the appropriate sample size for an unknown population in Thiruvananthapuram, the Cochran sample size calculation formula was applied. The study filtered the population based on specific criteria: respondents must have started stock market investment after 2018 (a period when streamlined advertising, Android apps, and AI-based tools became widely accessible) and must actively use at least one Android application related to stock market investment. These criteria were essential to examine the influence of streamlined advertising and AI-based marketing on changing the attitudes of stock market investors. Based on the sample size formula, the study aimed to collect data from 384 respondents, evenly distributed across four groups: 96 respondents each from government employees, Kerala University teaching staff, IT professionals from Technopark, and business persons. A purposive sampling method was employed to select respondents from each group. A pretested questionnaire was used

for data collection. Responses were gathered through various channels, including direct collection, email, WhatsApp, Telegram, and Google Forms. A total of 632 questionnaires were distributed to potential respondents. Of these, 594 questionnaires were returned. After filtering out incomplete responses, the final dataset consisted of 425 valid questionnaires. To ensure equal representation across the four groups, a random selection was made from the valid responses.

Data Analysis and Discussion

Data analysis and discussion are presented as the following scheme of presentation, i.e., profile of sample respondents, investors' perceptions about streamline advertising and AI-based marketing efforts, and the effect of streamline and AI-based marketing on changing the attitude of stock market investors.

Profile of Sample Respondents

The data analysis indicates that the majority of respondents in each group are male, comprising 75 per cent of government employees, 68 per cent of university teaching staff, 54 per cent of IT sector employees, and 72.5 per cent of businesspersons. Additionally, the results reveal that most respondents are highly educated, with 61.8 per cent holding qualifications above the postgraduate level. Among business persons, however, the majority have a bachelor's degree. Regarding investment patterns, 78.9 per cent of respondents identify as daily traders. Of the total sample, 48.5 per cent expressed a willingness to take risks in their investments, while 31.3 per cent reported having limited risk tolerance and preferred safer investment strategies. The remaining respondents were uncertain about risk-taking and safe play, relying heavily on advice from consultants through online platforms, Android applications, and AI-based tools.

Investors' perception about Streamline Advertising and AI-based marketing efforts

At the initial stage of data collection, the study examined respondents' views on the impact of the current stock market environment, focusing on aspects such as information availability, accessibility, and the 24-hour AI consultancy. The findings revealed that the majority of respondents (89.6 per cent) started investing due to the ease of accessing information and the round-the-clock availability of consultancy. Additionally, 67.8 per cent of respondents stated that AI-driven fund management systems and stock market advice helped alleviate their concerns about investment risks. This suggests that the availability of continuous support and personalized insights through AI has significantly reduced barriers to stock market participation, particularly in terms of risk perception.

Table 2 provides insights into stock market investors' perceptions of the influence of streamlined advertising and AI-based marketing efforts. These efforts were evaluated using three key measures: content, presentation, and information flow. Additionally, the table highlights the benefits experienced by investors and changes in their attitudes regarding risk

Table 1

Perception of Stock Market Investors About Streamline Advertising and AI based Marketing

Variables	Source	Internal Consistency
Content		
High-quality and well-structured advertising content Clear, concise, and relevant information, encourages more proactive participation, offering visually appealing and interactive content, Volume of information under the content, Minimizing uncertainty through rich content	Skardal &Driveklepp, 2023, Allianz, 2017, Rooij et al., 2011	Cronbach's Alpha 0.863 (S), 59.15 per cent of variance extracted
Presentation		
Visually attractive presentation, Simple and understandable presentation, creating a positive attitude, Addressing risks by presentation, Instant access mode, Interactive mode presentation of content	Betermier et al.,2021; Calvet et al.,2009;Mehta, 2000; Sabuncuoglu-Inanc et al., 2020	Cronbach's Alpha 0.818 (S), 44.4 per cent of variance extracted
Information flow		
Delivery of relevant investment opportunities, Delivery of relevant information, Continuous flow of information, Simple and understandable information flow, Explanatory information about technicality, Updated information on market trends and opportunities, Instant access to information, Prioritize accessible and dynamic financial education.	Mehta, 2000; Sabuncuoglu-Inanc et al., 2020; Kapoor et al., 2021; Aqsa & Kartini, 2015; Mehta, 2000	Cronbach's Alpha 0.863(S), 73.21 per cent of variance extracted
Benefits		
Fostering greater engagement and trust, getting essential elements for making investment decisions, encouraging more proactive participation, providing financial education, Stock market more approachable and inclusive, Reducing the concerns about the risk, Positive attitude toward stock market participation	Skardal &Driveklepp, 2023; Kapoor et al., 2021; Aqsa & Kartini, 2015; Mehta, 2000	Cronbach's Alpha 0.912(S), 69.53 per cent of variance extracted
Changing Attitude		
Positive perception about risk factors, investment pattern and frequency, diversifying the profile of investment, and seeking more investment opportunities	Aqsa & Kartini, 2015; Mehta, 2000	Cronbach's Alpha 0.822(S), 51.3 per cent of varianceextracted
(S)= Standardized Value, Pilot study sample: randomly approached 20 respondents from each group, i.e., a total of 80 respondents from Thiruvananthapuram. These 80 respondents were excluded from final data collection.		

Source: Primary data

factors, investment patterns, diversification, and overall investment approach. Based on a one-sample t-test (shown in the bottom row of the table), all the assessed factors were found to be statistically significant.

The descriptive statistics further reveal that the majority of respondents hold a positive perception of the influence of streamlined advertising and AI-based marketing efforts. This suggests that such marketing strategies are positively

Table 2

Stock Market Investors' Perceptions of the Influence of Streamlined Advertising and AI-Based Marketing Efforts

F	QC	Statements	Mean	SD	SEM	MANOVA
Content	Con_1	High-quality and well-structured advertising content	4.35	.554	.028	Wilks' Lambda=.924, F=.959 (18.,1061.145), p-v=.071
	Con_2	Clear, concise, and relevant information	4.29	.933	.048	
	Con_3	Encourages more proactive participation	4.31	.473	.024	
	Con_4	Offering visually appealing and interactive content	4.16	.896	.046	
	Con_5	Volume of information under the content	4.63	1.088	.056	
	Con_6	Minimizing uncertainty through rich content	4.64	1.311	.067	
Presentation	Pre_1	Visually attractive Presentation	3.92	1.073	.055	Wilks' Lambda=.794, F=.896(18.,1061.145), P-v=.089
	Pre_2	Simple and understandable presentation	4.36	1.038	.053	
	Pre_3	Creating positive attitude	4.29	1.036	.053	
	Pre_4	Addressing risks by presentation	3.80	1.200	.061	
	Pre_5	Instant accessing mode	4.00	1.052	.054	
	Pre_6	Interactive mode presentation of content	4.28	.549	.028	
Information flow	IF_1	Delivery of relevant investment opportunities	4.67	1.060	.054	Wilks' Lambda=.945, F=.889(24.000,1082.415), P-v=.618
	IF_2	Delivery of Relevant information	4.10	.732	.037	
	IF_3	Continuous flow of information	4.37	.509	.026	
	IF_4	Simple and understandable information flow	4.44	.503	.026	
	IF_5	Explanatory information about technicality	4.14	1.156	.059	
	IF_6	Updated information on market trends & opportunities	4.41	1.360	.069	
	IF_7	Instant access to information	4.16	.606	.031	
	IF_8	Prioritize accessible and dynamic financial education	4.94	.994	.051	
Benefits	B1	Fostering greater engagement and trust	4.15	1.006	.051	Wilks' Lambda=.921, F=1.219(18.000,1061.145), P-v=.068
	B2	Essential elements for making investment decisions	4.52	.693	.035	
	B3	Encourages more proactive participation	4.51	.730	.037	
	B4	Providing financial education	4.32	.704	.036	
	B5	Stock market more approachable and inclusive	4.02	.564	.029	
	B6	Reducing the concerns about the risk	4.70	1.074	.055	
Changing Attitude	CA_1	Risk factor	4.88	.647	.033	Wilks' Lambda=.970, F=.959(12.000,997.740), P-v=.487
	CA_2	Investment Pattern	4.01	.847	.043	
	CA_3	Diversification	4.04	.723	.037	
	CA_4	Seeking more investment opportunities	4.97	.993	.051	

Content=$t_{(383)}$ =47.809, P-v=.000; Presentation= $t_{(383)}$ =25.711, P-v=.000; Information Flow= $t_{(383)}$ =29.335, P-v=.000; Benefits= $t_{(383)}$ =37.640, P-v=.000; Changing Attitude= $t_{(383)}$ =40.559, P-v=.000

Source: Primary data

impacting stock market investors. The table also includes the results of a one-way MANOVA test. These results indicate that none of the factors are statistically significant across the four respondent groups: government employees, IT sector professionals, business persons, and Kerala University teaching staff. This finding implies that perceptions of the influence of streamlined advertising and AI-based marketing efforts are consistent across all groups.

Effect of streamline and AI based marketing on changing the attitude of stock market investors

The study was processed confirmatory factor analysis regarding five factors i.e., Content, Presentation, Information Flow, Benefits, and Changing Attitude. The model fit indices shows that absolute fit indices (Standardized RMR =0.324, CMIN=724.345, p-v=0.054, RMSEA=0.064) are within acceptable ranges, further CFI was 0.921, and Parsimonious fit was 3.915 (X2/df (Discrepancy Ratio)). This shows how well the proposed model aligns with the observed data. Further, the CFA result (Figure 1) indicates that all the factor loadings are above 0.50, which is in an acceptable range and producing a strong correlation between the latent factors. Hence, it can be inferred that this five-factor solution is well suited for the data.

Path Diagram: Significant impact of Streamline Advertising and AI-based marketing efforts on changing the investment attitude of stock market investors

Model Fit Indices: The model fit indices indicate that the absolute fit

Figure 1

Confirmatory Factor Analysis

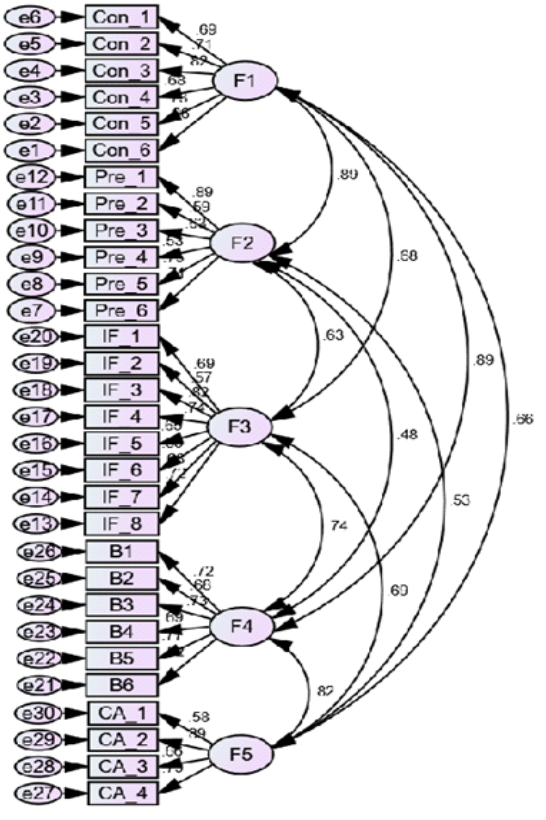
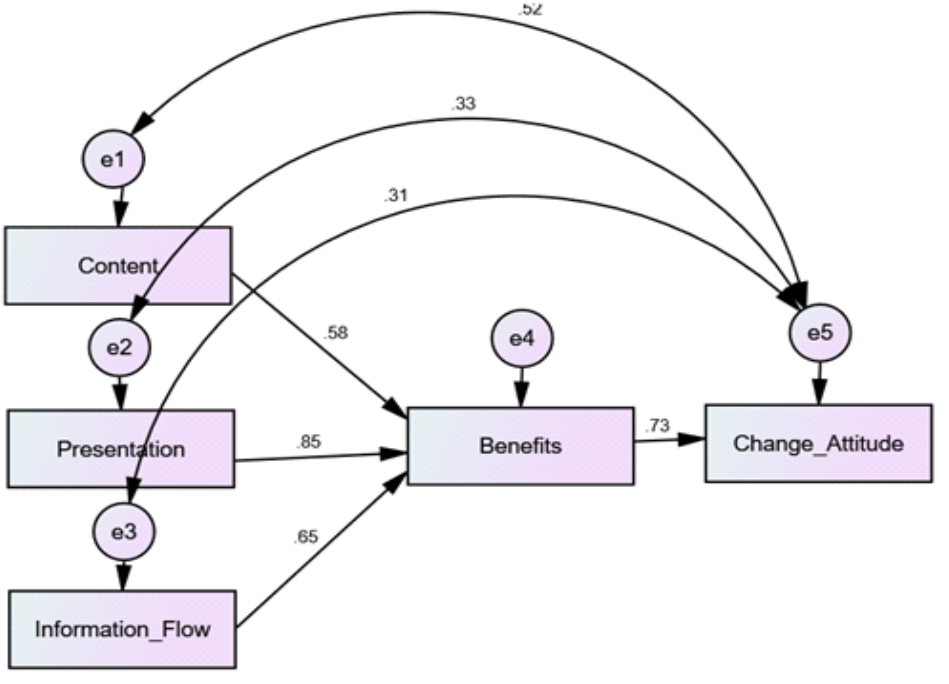


Figure 2
Path Diagram



measures are within acceptable ranges: Standardized RMR = 0.574, CMIN = 925.678 (p = 0.05), and RMSEA = 0.051. Additionally, the Comparative Fit Index (CFI) was 0.908, demonstrating a good model fit, and the Parsimonious fit index (X^2/df, Discrepancy Ratio) was 4.366, further supporting the model's adequacy. The analysis revealed the following relationships among the proposed variables:

Content → Benefits (SRW = 0.586, $p < 0.05$, Presentation → Benefits (SRW = 0.853, $p < 0.05$), Information Flow → Benefits (SRW = 0.650, $p < 0.05$), Benefits → Changing Attitude (SRW = 0.734, $p < 0.05$)

All relationships were statistically significant, with positive Standardized Regression Weights (SRW), confirming that content, presentation, and information flow significantly contribute to the perceived benefits of streamlined advertising and AI-based marketing. Furthermore, these perceived benefits were found to have a strong positive impact on changing the attitudes of stock market investors. The results demonstrate that efforts in streamlined advertising and AI-based marketing—particularly in optimizing content, presentation, and information flow—have a significant and positive influence on the attitudes of stock market investors. These findings highlight the transformative role of technology-

driven advertising strategies in shaping investor behavior.

Hypotheses Result

The results of the One-Sample t-test (Table 1) indicate that all factors - Content, Presentation, and Information Flow of streamlined advertising and AI-based marketing efforts - are statistically significant. The test provides sufficient evidence to support the influence of these efforts on stock market investors. Consequently, the null hypothesis is rejected, confirming that streamlined advertising and AI-based marketing efforts have a significant positive impact on stock market investors.

For the second hypothesis, the path diagram (Figure 2) demonstrates a significant and positive relationship between the benefits of streamlined advertising/AI-based marketing and the changing attitudes of stock market investors. Based on these findings, the null hypothesis is also rejected, establishing that streamlined advertising and AI-based marketing efforts are positively influencing and altering the attitudes of stock market investors.

Major findings

The study focuses on three key factors - content, presentation, and information flow - associated with streamlined advertising and AI-driven marketing efforts. Analysis of investor perceptions reveals that these factors significantly influence investor attitudes. The benefits of streamlined advertising and AI-driven marketing are seen in their ability to shape investment attitudes, particularly in areas such as risk perception, investment patterns, portfolio diversification, and the pursuit of new investment opportunities.

The findings indicate that these technologies play a critical role in enhancing financial literacy, providing continuous information flow, and supporting investors in managing risk. Additionally, these systems offer value-added services such as consultancy and interactive sessions, further empowering investors with knowledge and tools to make informed decisions.

Conclusion

The study concludes that streamlined advertising and AI-driven marketing efforts have a profound impact on stock market investors. By addressing gaps in financial literacy, risk understanding, and information accessibility, these technologies contribute to more informed and confident investment behaviors. Their ability to bridge knowledge, literacy, and risk gaps highlights their potential as transformative tools in reshaping investment attitudes and fostering broader participation in the stock market.

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