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From Mobile Trading to Intelligent Investing: A Bibliometric and Thematic Review of AI-Driven Financial Investments

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ABSTRACT

Mobile stock trading apps with artificial intelligence (AI) capabilities are revolutionising retail investing and financial decision-making globally. These platforms have attracted a lot of interest from retail investors due to their rapid digitalization and AI-based investment capabilities, but the research that has been done so far is still dispersed across disciplines and geographical areas. To bridge this gap, the current study conducts a bibliometric and thematic analysis of research on mobile stock trading applications and AI-based investment decision-making. The research integrates the PRISMA framework with Khanra and Dhir's methodology. For the final synthesis, 243 Scopus-indexed articles that met the preset inclusion and exclusion criteria were included. The findings reveal that although the earliest publication related to retail investment appeared in 1983, literature specifically focused on mobile stock trading applications emerged after 2013, with a rapid rise in publications since 2021. China, the United States, and Turkey were the prominent contributors, with Finance Research Letters being the top leading journal. Based on the author co-authorship network analysis, a total of 18 authors are interconnected with each other, comprising four clusters with an inclusion threshold of 5 citations. The thematic analysis identified four major clusters: AI-driven investment and sustainability, behavioural biases in AI-assisted investing, fintech platform adoption, and retail investor decision-making through mobile trading applications. However, stronger regulatory frameworks, increased investor awareness, better AI literacy, ethical governance systems, and more thorough empirical research on post-adoption investment behaviour and long-term investor results are necessary for this sector to flourish sustainably.

Keywords: Mobile stock trading , Artificial intelligence, Retail investment, Fintech, Investment decisions

JEL codes: G11, G41,G23.

1. INTRODUCTION

The Internet infrastructure has contributed to the continued development of economic activity, including financial markets, with a trend toward online investing platforms in recent years. (Mendoza et al., 2025) The rapid advancement of financial technology (FinTech) has significantly transformed the global investment landscape, particularly through the proliferation of mobile stock-trading applications (Ashraful Alam et al., 2025). These platforms have democratised access to financial markets by enabling retail investors to trade securities more easily, at lower transaction costs, and with access to real-time information. Further, low data prices, rapid smartphone adoption, and an expanding middle class with aspirations for financial independence are key factors that have contributed to this growth in the Indian context. The outbreak has heightened the significance of innovation in the financial service sector; however, the pandemic further accelerated digital transformation through the increased use of digital payments, especially in developed regions where e-commerce and mobile payment systems were already well established. (Bhopal et al., 2025). This shift gradually fueled the adoption of mobile stock trading platforms, particularly in the Indian context, where the transformation has been significantly driven by the parallel expansion of digital infrastructure, rising internet penetration, and widespread smartphone adoption. Over the last decade, India has witnessed a substantial rise in digital connectivity, which has facilitated the onboarding of millions of first-time investors into capital markets. The development of user-friendly mobile trading platforms, more affordable internet access, and rising smartphone adoption are all intimately related to the rise in retail involvement (S Parsheera, 2022). The digital revolution, streamlined account creation procedures, and the rise of inexpensive brokerage platforms have all greatly reduced the barriers to entry for retail involvement. The extent of this change is demonstrated by empirical data. The number of dematerialised (demat) accounts in India has increased dramatically Over the past four years, the number of demat accounts in India has soared from 40 million to 150 million. Most of these new investors are under 35, digitally savvy, and armed with user-friendly apps such as Zerodha, GROWW, and Upstox. (Jayatu Sen Chaudhury & Akhter M. Rather, 2025). This boom has been aided by factors uniquely Indian: low data costs, rising smartphone penetration, and a growing middle class with aspirations of financial independence, reflecting more than a fivefold increase in retail investor participation . Similarly, total demat accounts crossed the nearly 21 crore

mark in October 2025, compared to around 4 crore in 2020, indicating rapid expansion within a short period (The Economic Times, 2025). This surge has been further accelerated in the post-COVID-19 period, where digital adoption, work-from-home conditions, and increased financial awareness encouraged individuals to explore equity investments as an alternative avenue for wealth creation. According to the National Stock Exchange, there would be over 13 crore unique investors and over 25 crore customer accounts by 2026, demonstrating the ongoing expansion of the investor base (NSE, 2026).

Artificial Intelligence has emerged as a crucial enabler within this ecosystem, enhancing the decision-making capabilities of retail investors. However AI recommendations has significantly transformed traditional investment practices, particularly among young, digitally active, and first-time retail investors using mobile trading platforms. Moreover, fintech innovations and neo-broker applications are increasingly encouraging retail investor participation by providing user-friendly interfaces, lower transaction costs, accessibility, and AI-driven personalized investment support (Phan et al., 2025). New AI-powered features, such as robo-advisory services, algorithmic trading support and news & social media data-driven sentiment analysis, are radically changing the landscape of interaction of investors and financial markets (Acunto et al., 2019).

Nevertheless, the current literature is still dispersed despite the quick growth of AI-enabled mobile trading platforms and the exponential rise in retail investor involvement in India. Particularly in developing nations like India, there is a dearth of thorough knowledge regarding how AI affects the behaviour of retail investors in the context of mobile trading applications. Furthermore, there is still a lack of research on topics like behavioural biases, financial literacy, and trust in algorithmic recommendations in the context of AI-driven investment settings (Arslan & Kekeç, 2023; Saraçlı et al., 2023; Xu et al., 2023). In this context, this study aims to map the intellectual structure, identify important research themes, and highlight emerging trends, research gaps, contributions, and future obstacles. A bibliometric analysis of artificial intelligence applications in mobile stock trading for retail investor behaviour, as well as a descriptive framework are provided (Bhopal et al., 2023). The results are expected to provide insightful information to scholars, professionals, and policymakers, especially when it comes to comprehending how AI and digital transformation are changing Indian retail investment behaviour through the use of mobile stock trading apps (Imran & Rehman, 2024; Kaur et al., 2024; Inder et al., 2022).

RQ1: What is trend of publications on investment decisions in the context of Mobile stock trading applications?

RQ2: Which are the most influential countries, journals, articles and authors that have contributed towards literature of mobile stock trading applications in Investment decisions?
RQ3: What are the influential research themes in this domain?
RQ4: What is the future research agenda of Artificial Intelligence-Enabled Mobile Stock Trading Applications for Investment Decisions.

2. RESEARCH METHODOLOGY

The current study has adopted the bibliometric and thematic analysis to structure the existing knowledge and analyze the field of mobile trading applications in Investment decisions as previous studies also incorporated these techniques to synthesized the literature in different domains (Ahuja et al., 2025; Bala et al., 2025; Dhingra et al., 2024; Horani et al., 2025; Jain et al., 2022). To perform the transparent literature review, this study have followed the approach provided by the (Khanra, Dhir, & Mäntymäki, 2020; Khanra, Dhir, Islam, et al., 2020), which includes three stages: scanning, curating and reporting the sample.

2.1 Scanning Phase

To perform this study, an initial exploration of relevant keywords related to mobile trading adoption for investment was carried out using the Google Scholar database. Based on the preliminary examination of the existing literature, key words to this domain are investing, trading, mobile based trading/investing, retail investment, fintech, digital investment, AI based mobile trading application. Using these keywords, a comprehensive search string was developed to ensure the broader aspect of this domain.

Title: “mobile stock trading” OR “retail investment” OR “mobile retail investment” OR “mobile investing” OR “mobile stock trading” OR “mobile equity trading” OR “trading app” OR “stock trading application” OR “share trading application” OR “investment application” OR “mobile investment application” OR “mobile investment platform” OR “fintech trading app” OR “fintech investment platform” OR “wealthtech” OR “digital investment service” OR “mobile brokerage application” OR “online brokerage application” OR “mobile finance application” OR “automated investment service” OR “algorithmic investment platform” OR “AI-driven trading” OR “agentic AI” OR “service Robot*” OR “social robot*” OR “robo advisor*” OR “artificial Intelligence*” OR “AI chatbot*” OR “chatbot*” OR “conversational AI”
And
Title: "investing" OR "stock trad*" OR "investment*"
The search query was performed in March 2026 using the Scopus Database to retrieve the publications within this domain. The Scopus database has been selected due to the wide coverage of publications of multidisciplinary research. Further, Scopus database

is one of the largest database which includes high quality journals articles, books, conference proceedings and review articles. Also, it covers large pool of publications related to business and management domains. In this regard, the query was performed in Scopus database initially yielded (stage 1) a total of 444 publications.

2.2 Curating Phase

After the initial pool of publications of 444, the documents are screened based on the study's inclusion and exclusion criteria. Only studies categorized as Journal articles and published in the English language were considered for inclusion for final synthesis of the study.

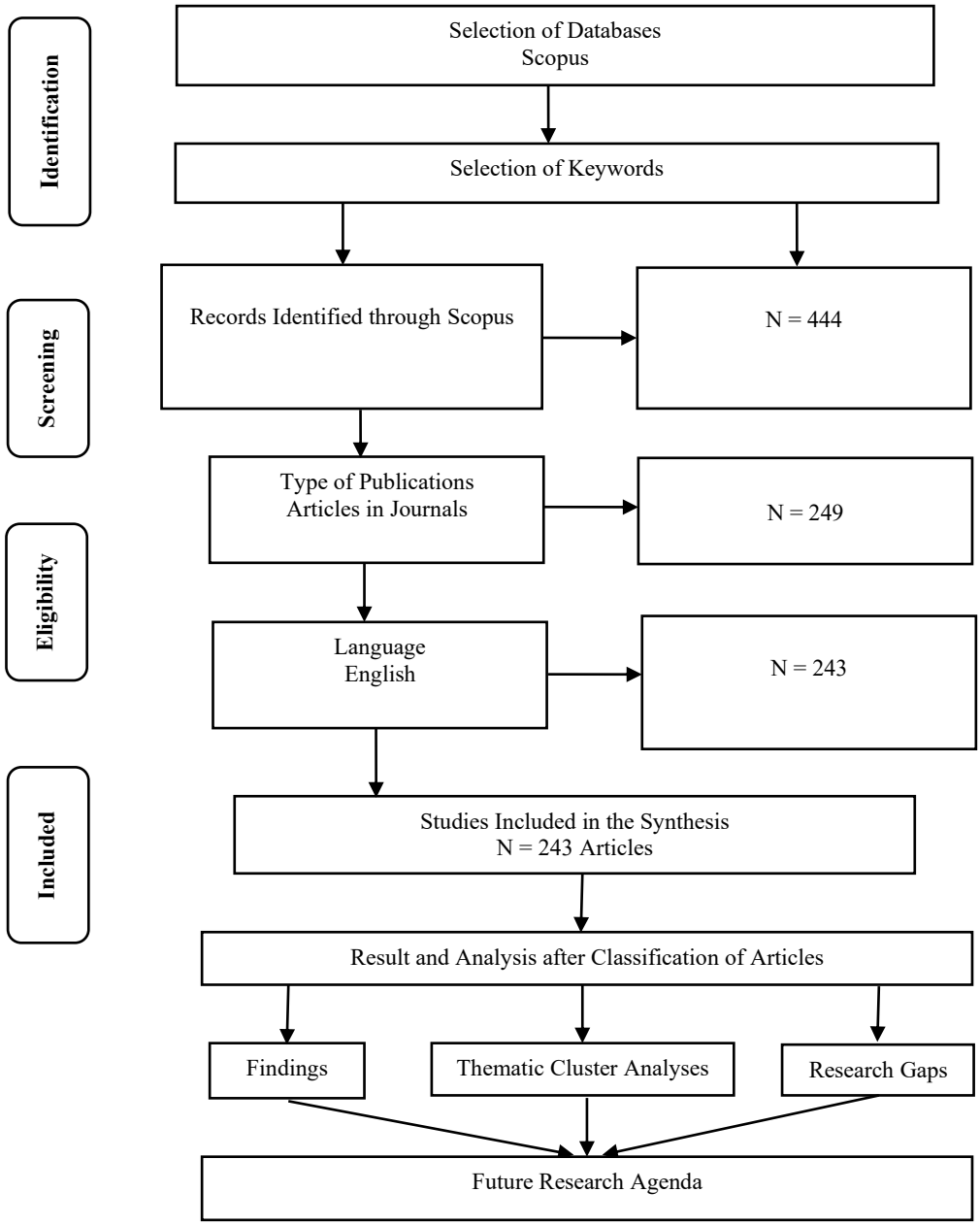

Figure 1: Flowchart of the study based on PRISMA (Moher et al., 2010)
Source : Author's own compilation

In stage 2 of screening, the study excluded the document type such as "conference proceedings", book chapters, review articles, book, and editorial and included publications categorized as "articles". Based on this, a total of 250 articles were retained. In stage three, the publication classified in source type "trade journal" were excluded, and only documents published in Journal category were included. In this regard, 249 articles published in journal category were retained. Finally, based on language screening, only articles published in journal which are in English were selected for final synthesis of the study which yielded a total of 243.

2.3 Analyzing and Reporting Phase

The retrieved articles were analyzed using two software packages; "Biblioshiny" from R 4.0.3 package program and "Vosviewer" using sequential techniques including year and citation wise publications, Journal wise publications, Country wise publications with citations, Authors in terms of publications with citations, Network Analysis, Most cited articles, and Theme based cluster analysis, . The flow diagram based on PRISMA framework (Moher et al., 2010) shown in Figure 1.

3. FINDINGS AND DISCUSSIONS

The findings showed that the 243 documents that were taken out of the Scopus database were published in 190 different sources. The following are the study's principal findings:

3.1 Year and citation wise publication

According to the search string, the first study was published in 1983 in the context of retail investments; however research on mobile trading applications for investment decisions has drawn attention among researchers starting in year 2013. Initially, only 1 document is published in the year 2013. However, subsequent years witnessed a substantial surge in publications and citations within this domain. In particular, year 2021 recorded 20 publications and 744 citations, indicating a notable escalation in scholarly attention and exploration after the covid pandemic 2019 as presented in Figure 2. The growth in publications and citations are attributed to the rapid advancement of improved digital infrastructure leading to transform in retail investment behavior and increasing the adoption of technology-driven investment practices.

3.1 Year and Citation wise publications

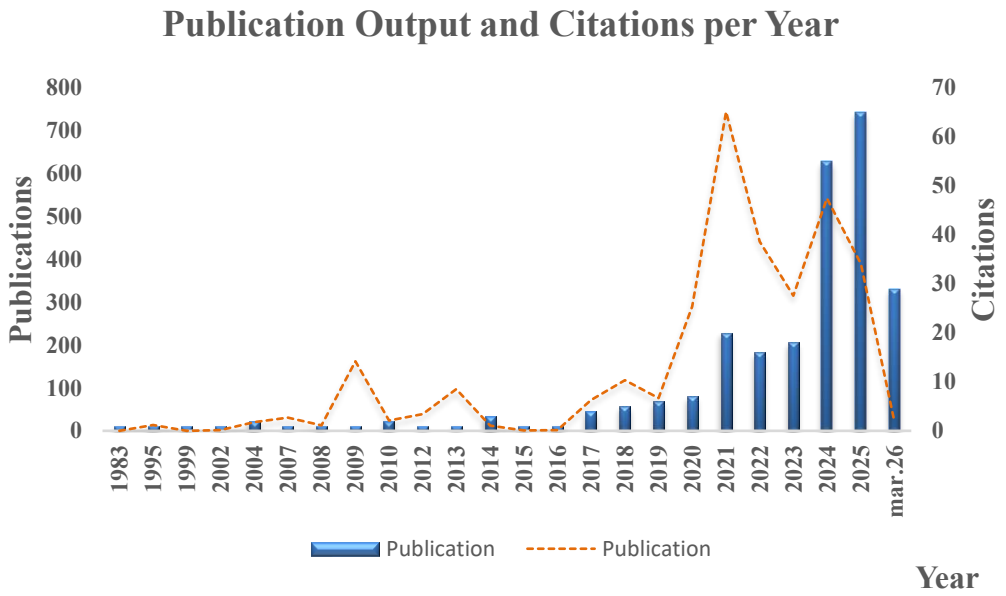

Figure 2: Year and Citation wise publications

3.2 Journal Wise Publications

Table 1 shows the top 10 journals that have published articles on Retail investments on mobile trading applications for investment decisions. Among these, Finance research letters has published the highest number of Article's in the current domain with a total of 10 publications followed by International review of economics and finance and sustainability with both have published 6 articles each. Finance research letters primarily publishes research in the broad area of finance which includes "actuarial science", "portfolio choice and investing", "personal finance", "financial markets and marketplaces", "credit and fixed income markets and instruments" and others, whereas, International review of economics and finance published theoretical and empirical research in the fields of economics and finance covering areas such as "Fintech", Technological change and innovation", corporate finance", "financial markets and institutions", "behavioral economics and finance" and others. The list further includes journals "artificial intelligence review", "credit and capital markets", "international review of financial analysis", or "journal of theoretical and applied information technology", "proceedings on engineering sciences", sustainable development", each published 3 articles followed by "annals of operations research" with 2 articles published.

Table 1: Top 10 Journals based on publications

Journal Wise Publication

S.No	Sources	Articles
1	Finance Research Letters	10
2	International Review Of Economics And Finance	6
3	Sustainability (Switzerland)	6
4	Artificial Intelligence Review	3
5	Credit And Capital Markets	3
6	International Review of Financial Analysis	3
7	Journal Of Theoretical And Applied Information Technology	3
8	Proceedings On Engineering Sciences	3
9	Sustainable Development	3
10	Annals Of Operations Research	2

3.3 Country-wise publications with citations

The country-wise distributions of publications and citations demonstrate that the research on Retail investments on mobile trading applications for investment decisions has attracted scholarly attention around the globe. Among the 243 documents analyzed, a total of 59 countries have contributed in this research domain in which China is the leading contributor in total documents published with a total count of 70 articles and 807 citaitons as presented in Figure 3. Followed by China, United States (33 documents, 617 citations), Turkey (23 documents, 211 citations), South Korea (18 documents, 191 citations), and United Kingdom (18 documents and 495 citations) are the top 5 countries in terms of publications.

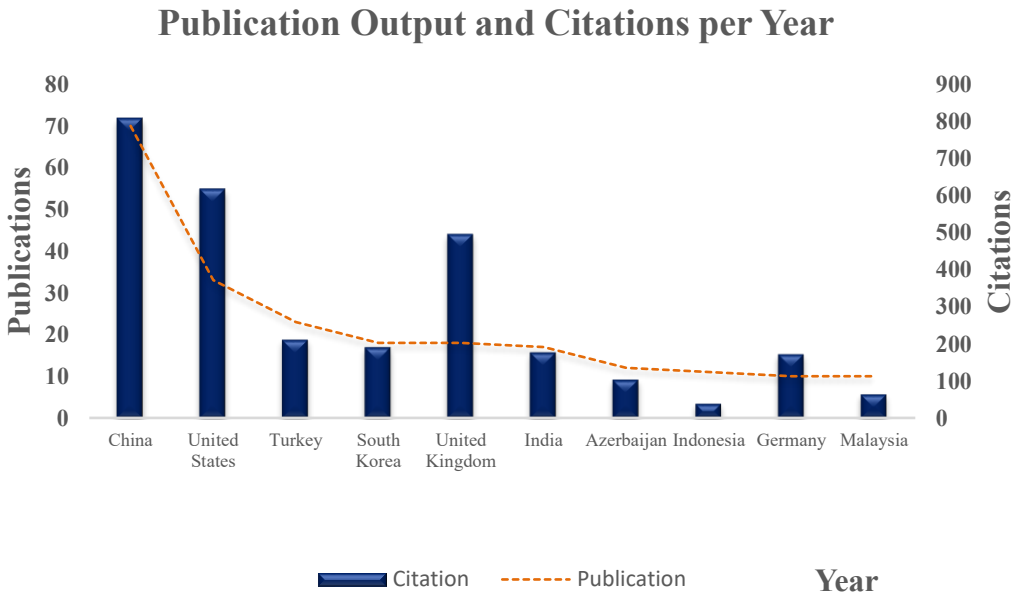

Figure 3: Country Wise Publications with Citations

Followed by these five countries, India, Azerbaijan, Indonesia, Germany and Malaysia are placed in top contributors. The findings of the study revealed both developing and developed countries are contributing to the current domain, which highlights the global relevance of mobile trading applications in retail investment practices. The findings also suggest that the dominance of publications by Asia countries in the research domain including China, South Korea, India, Indonesia, Malaysia, may attributed a significant rapid expansion of technological advancement of the financial ecosystem. Followed by these five countries, India, Azerbaijan, Indonesia, Germany and Malaysia are placed in top contributors. The findings of the study revealed both developing and developed countries are contributing to the current domain, which highlights the global relevance of mobile trading applications in retail investment practices. The findings also suggest that the dominance of publications by Asia countries in the research domain including China, South Korea, India, Indonesia, Malaysia, may attributed a significant rapid expansion of technological advancement of the financial ecosystem.

3.4 Authors in terms of publications and citations

The retrieved 243 articles based on the study's inclusion criteria revealed that 684 authors have contributed in the current field. Out of 684 authors, the study presented top 10 authors in terms of publications and citations as presented in Table 2. In terms of research productivity, Serhat Yuksel emerged out as the leading contributor with 10 documents. Among the most productive authors, Serhat Yüksel has made a significant scholarly contribution to the fields of financial markets, investment decision-making, fintech, banking, risk management, sustainability, renewable energy economics, and multi-criteria decision-making approaches.

Table 2: Author Wise Publications and Citations

S.No	Author	Documents	S.No	Author	Citations
1	Yuksel, Serhat	10	1	Ashta, Arvind	288
2	Dinçer, Hasan	9	2	Herrmann, Heinz	288
3	Eti, Serkan	8	3	Esteves, Ana Maria	162
4	Kou, Gang	4	4	Vanclay, Frank	162
5	Pamucar, Dragan	4	5	Shanmuganathan, Manchuna	157
6	Burghof, Hans-Peter	3	6	Khalid, Fahad	140
7	Deveci, Muhammet	3	7	Dai, Ke	134
8	Ergun, Edanur	3	8	Su, Chi-Wei	134
9	Gokalp, Yaşar	3	9	Tao, Ran	134
10	Kirikkaleli, Dervis	3	10	Xiao, Yidong	134

According to his academic profiles on Scopus Database, he has published more than 340 research publications and received over 4,400 citations, with an h-index of 32. Followed by Serhat Yuksel, Hasan Dinçer (9 Documents), Serkan Eti (8 Documents), Gang Kou (4 Documents), Dragan Pamucar (4 Documents), are the top five leading contributors in the Retail investments on mobile trading applications for investment decisions. With respect to citation impact, Arvind ashta and Heinz Herrmann were topped the list as most influential author each received 288 citations each followed by Ana Maria Esteves (162 Citations), Frank Vanclay (162 Citations), and Manchuna Shanmuganathan (157 Citations).

3.5 Most Cited Articles

The most cited articles within the domain are mainly focus on the investment behavior of retail investors and growing adoption of rapid advancement of technology in financial decision making. Among 243 articles retrieved, Ashta and Herrmann (2021) has received the highest citations count of 288.

Table 3: Most Cited Articles

S.No	Author	Title	Citations
1	Ashta and Herrmann (2021)	"Artificial intelligence and fintech: An overview of opportunities and risks for banking, investments, and microfinance"	288
2	Shanmuganathan (2020)	"Behavioural finance in an era of artificial intelligence: Longitudinal case study of robo-advisors in investment decisions"	157
3	(Tao et al., 2021)	"Robo advisors, algorithmic trading and investment management: Wonders of fourth industrial revolution in financial markets"	134
4	Wang et al. (2025)	"Does Artificial Intelligence (AI) enhance green economy efficiency? The role of green finance, trade openness, and R&D investment"	109
5	Brunen and Laubach (2022)	"Do sustainable consumers prefer socially responsible investments? A study among the users of robo advisors"	72
6	Hyun and Kim (2023)	"Ai robo-advisor anthropomorphism: The impact of anthropomorphic appeals and regulatory focus on investment behaviors"	67
7	Uhl and Rohner (2018)	"Robo-advisors versus traditional investment advisors: An unequal game"	63
8	Mohammed et al. (2024)	"The role of artificial intelligence and fintech in promoting eco-friendly investments and non-greenwashing practices in the US market"	62
9	Bhatia et al. (2022)	"Digital innovation in wealth management landscape: the moderating role of robo advisors in behavioural biases and investment decision-making"	61
10	Hong et al. (2023)	"Robo-advisors and investment intention: A perspective of value-based adoption"	61

This article focused on the growth of Aritifical intelligence in the financial organizations due to the multiple benefits including cost reduction, operational effieciency and increase differentiation however the also emphazied the potential risk which financial organization need to consider including biased data, algorithm errors, excessive dependence on automated decision making which needs human oversight and risk management. Further, Shanmuganathan (2020) received the second highest citation count (157). This paper addresses on the recent AI applications including financial advisory services known as robo advising through longitudinal case study. The findings revealed that how robo-advisory platforms influence behavioral finance and investment decision-making processes by reducing emotional and cognitive biases among retail investors. This study further concluded that robo advisors provide financial literacy support and impartial expert advice to investors.

3.6 Author's Co-Authorship Network Analysis

Figure 4 presents the author co-authorship network analysis. The articles that have atleast 5 citation's count based on the Scopus database were taken into consideration for the further analysis of the co-authorship author network. After applying the threshold limit, a total of 339 authors are fit into this criterion. However, not all authors were interconnected, and the largest connected network consisted of 18 authors. These authors were further grouped into four distinct clusters based on their collaborative linkages.

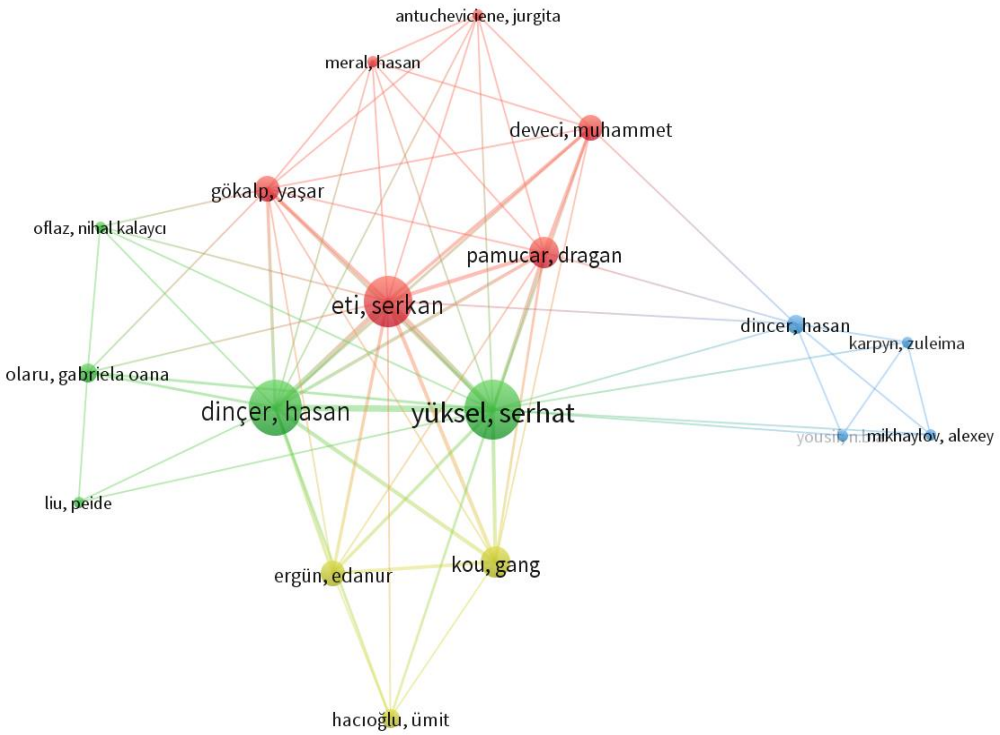

Figure 4: Author's Co-Authorship Network Analysis

Six authors are connected in Cluster 1, including Antucheviciene Jurgita, Deveci Muhammet, Etli Serkan, Gökalp Yaşar, Meral Hasan, Pamucar Dragan. In Cluster 2, five authors are interconnected including Dinçer Hasan, Liu Peide, oflaz Nihal, Kalaycı Olaru, Gabriela Oana, and Yüksel Serhat . Cluster 3 consisted of four authors namely Dinçer Hasan, Karpyn Zuleima, Mikhaylov Alexey, and Yousif. Cluster 4 contained three authors Engün Edanur, Hacıoğlu Ümit, and Kou Gang write each cluster into paragraph remove space .The findings indicate that collaboration among authors in this research domain remains relatively fragmented, with only a limited number of strong collaborative research groups identified.

4- THEME-BASED CLUSTER ANALYSIS-

Using the key word occurrences based on authors Keywords, the study developed four thematic clusters which are presented in Figure 4 and 5.

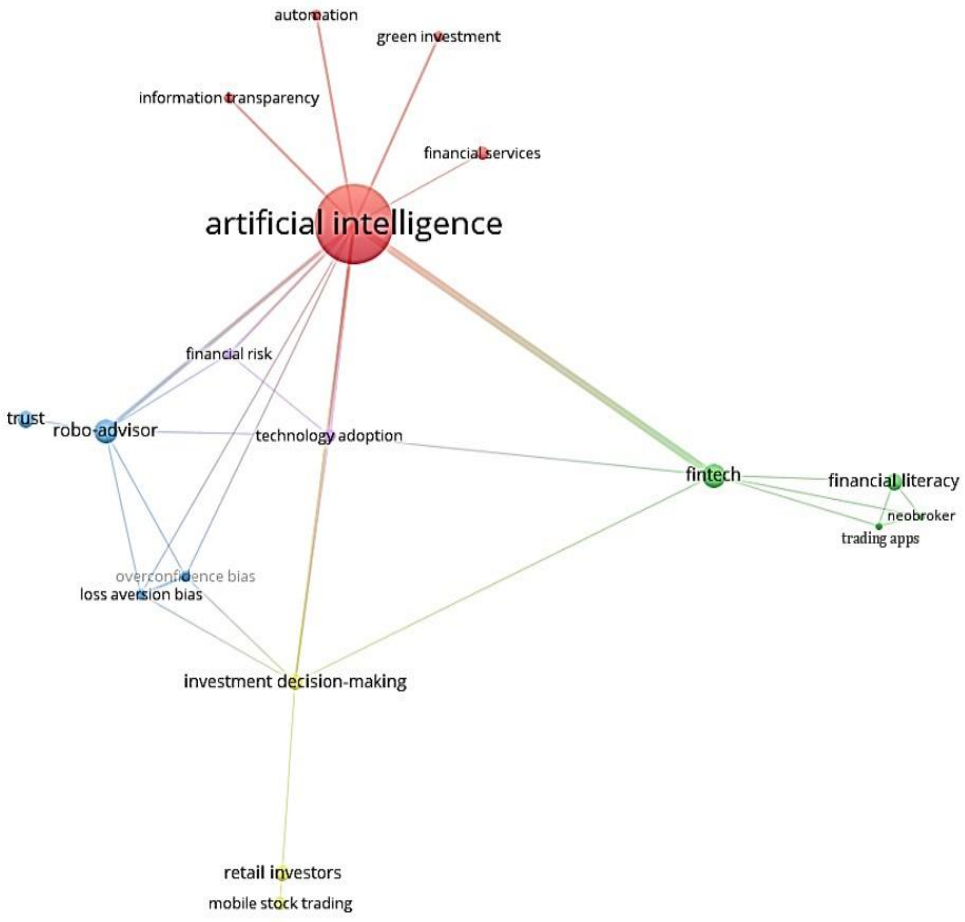

Figure 4: Keyword co-occurrences (VOS viewer)

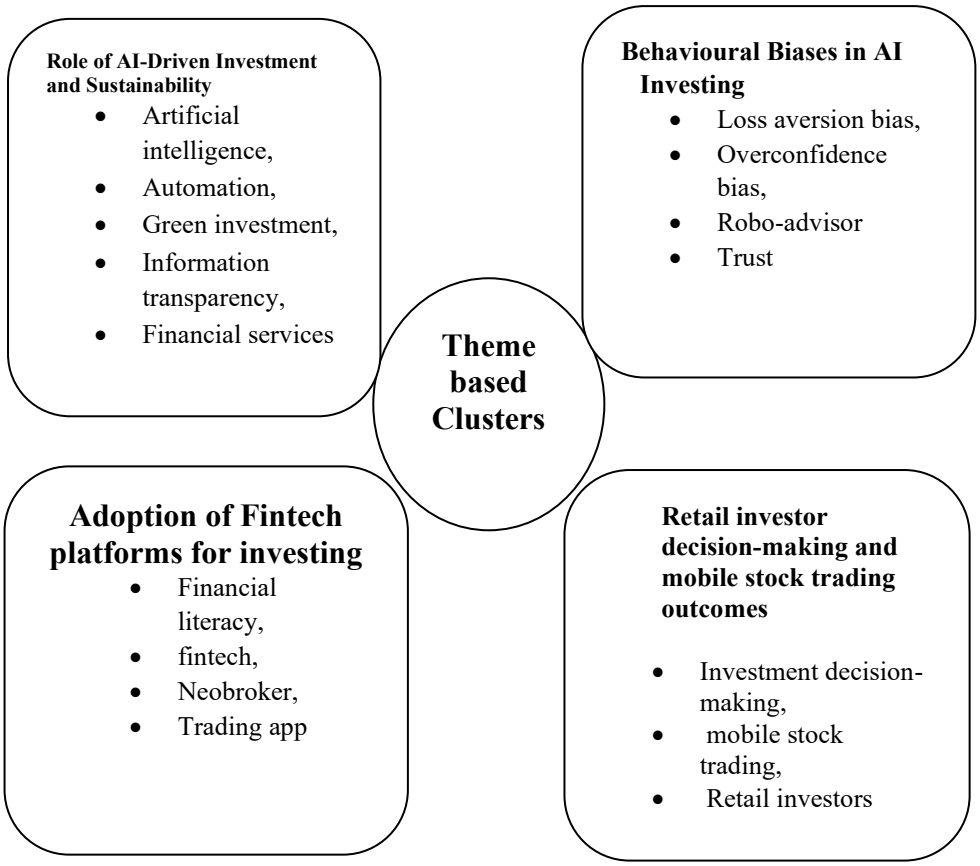

Figure 5: Thematic based cluster analysis

Cluster 1: Role of AI-Driven Investment and Sustainability

This theme encapsulates the ways in which artificial intelligence (AI) transforms sustainability, efficiency, and investment decision-making across industries. According to research, AI is a strategic facilitator of green finance, transparency, and investment optimization in addition to being a prediction tool. Many studies demonstrate how AI improves investment efficiency and decision-making quality, especially at the company and system levels (Shen et al., 2025; Zhao et al., 2024). Additionally, AI improves data-driven decision contexts, allowing for more effective capital allocation in the face of uncertainty (Antoncic, 2020). A strong substream highlights how AI impacts energy transitions and environmental performance, linking it to green and sustainable investment objectives (Akram et al., 2025; Hassan & Hassan, 2025). However, AI-powered models are crucial in decision-making regarding energy storage, carbon capture, and infrastructure investments and help to make better decisions (Kou et al., 2025). Additionally, AI helps transform financial services through cognitive analytics and automation (Ashta & Herrmann, 2021). This strengthens the idea that AI, which includes automation, efficiency, and sustainability, is crucial to next-generation investment ecosystems.

Cluster -2 Adoption of Fintech platforms for investing-

This theme aims to demonstrate investing through fintech platforms and mobile trading apps, with financial literacy prominently influencing user behaviour and acceptance. The evolution of trading apps and neobrokers has increased the associations of retail investors. Studies examine factors that influence the penetration and uninterrupted usage of mobile stock trading apps, predominantly among younger generations like Gen Z and Millennials (Chong et al., 2021; Gayatri & Kurniawan, 2024). Platform designers needs to prioritise user satisfaction and retention, research studies shows, these elements affect users' plans to stick with the platform (Hadi Putra et al., 2022). According to research, Financial literacy moderates the relationship between fintech access and investment performance. Big data, artificial intelligence, and financial literacy all have an impact on retail investing behavior, especially in developing countries (Lui et al., 2022). Further Digital literacy also affects Gen Z's inclination to use investment apps. (Tania & Tjhin, 2025). Additionally, there is the regulatory dimension. The hazards associated with mobile investment applications are addressed by the EU's retail investment policy and new rules, underscoring the necessity of investor protection in a quickly changing fintech environment (Coggiola, 2024; Foffano et al., 2022).

Cluster -3 Behavioural Biases in AI Investing-

This theme focuses on how trust influences the uptake and efficacy of automated investing advice, as well as how behavioral biases like loss aversion and overconfidence interact with robo-advisory services. By providing algorithm-driven portfolio recommendations, robo-advisors are revolutionizing wealth management. When the antecedents of robo-advisor usage intention are examined, research reveals that trust and perceived fiduciary duty have a major impact on adoption (Eren, 2024; Luo et al., 2024; Mammadova, 2023). Research on the development of confidence in AI-driven investment systems in contrast to human financial advisors has grown, with an emphasis on how investor decision-making is influenced by emotional reactions and neurological processes (Yang & Rau, 2024). Behavioral biases continue to be major issues. Investment decisions can be distorted by overconfidence, loss aversion, and the “snakebite” effect; study investigates whether robo-advisors reduce or increase these biases (Ahmad et al., 2025; Panakaje et al., 2025). the Consumer acceptance and behavior are influenced by robo-advisor design, including anthropomorphic elements (Hyun Baek & Kim, 2023b). The literature also looks at how robo-advisors can encourage investors to make sustainable and socially conscious investments preferences (Faradynawati & Soderberg, 2022).

Cluster -4 Retail investor decision-making and mobile stock trading outcomes-
This theme focuses on the decision-making processes of retail investors using mobile platforms, including the factors that drive adoption, continued use, and investment outcomes. Mobile stock trading has transformed retail investment. Studies examine whether investors will adopt mobile trading and what factors—such as perceived benefits, risks, and usability shape their decisions (Tai et al., 2013).The UTAUT and UTAUT2 models are frequently applied to understand technology acceptance in this context (Restuputri et al., 2023). Investment decision-making among retail investors is influenced by a combination of cognitive, social, and platform-specific factors. Research identifies antecedents of intention to recommend mobile stock trading applications, as well as factors influencing behavioural intention in digital investment services (Sembel et al., 2024). The impact of mobile trading on information asymmetry and investor sentiment is also explored. Retail investor behaviour, particularly in the Indonesian and Indian markets, is analysed to understand market-specific dynamics (Adrianto & Hamidi, 2020).

5. CONCLUSION AND FUTURE RESEARCH AGENDA-

With the growing interest of researchers, practitioners, and policymakers, research on mobile stock trading applications (MTAs) and their adoption for investment services has gained considerable momentum in recent years. The present study employed bibliometric and thematic analysis approaches to examine the evolving research landscape and to enhance understanding regarding the role of AI-enabled mobile trading applications in investment decision-making.

The bibliometric and thematic analyses offered a comprehensive overview of how research in this field has evolved. By witnessing at trends in yearly publications and citations, exploring which countries and authors have contributed most, highlighting influential articles, and mapping out key thematic clusters, The study looks at a more comprehensive view of this field's intellectual landscape. The findings show that research on AI and mobile stock trading apps has developed in three distinct phases. The formative stage (1983–2012) saw only a handful of studies and little academic focus. A consolidation phase From 2013 to 2018, the field began to consolidate, with more attention on digital transformation and technology adoption. Since 2019, rapid growth phase there has been a surge in research , demonstrating the speed at which the subject is growing. This shift emphasize how AI-powered mobile trading apps have become a key part of today’s retail investing and digital finance prospect. These applications have made it simpler for regular investors to enter financial markets by incorporating AI into investment platforms, benefit from automated tools, get real-time insights, receive personalized investment advice, and manage their portfolios more efficiently.

The research also shows that themes including AI-enabled investment efficiency, fintech ecosystems, robo-advisory adoption, behavioural biases, financial literacy, and technological acceptance are the main focus of the present literature. Four main study themes were found using the thematic cluster analysis, namely: "AI-Driven Investment and Sustainability", "Adoption of Fintech Platforms for Investing", "Behavioural Biases in AI Investing" and "Retail Investor Decision-Making and Mobile Stock Trading Outcomes". Additionally, the literature highlights how AI can help reduce information asymmetry, enhance investment analysis, facilitate technology-driven and sustainable investing practices, and promote predictive financial decision-making.

The analysis points up a number of significant research gaps that need for more scholarly investigation despite the growing amount of research in this field. First, a significant amount of current research uses frameworks like TAM, UTAUT, and similar behavioural intention models to focus on the initial adoption intention of mobile trading applications. however Post-adoption behavior, continuance intention, long-term engagement, investor pleasure, and actual investment outcomes following the adoption of AI-enabled mobile trading apps, have received very little study. As a result, it is still unclear whether ordinary investors stick with these platforms over time or stop using them because of things like perceived risk, technological complexity, trust concerns, or financial losses. Second, most empirical studies are concentrated in developed nations or chosen emerging economies such as China and Indonesia, whereas, despite significant increases in retail investor involvement, fintech acceptance, smartphone penetration, and AI-enabled financial services, developing nations like India are still relatively understudied. India has seen a sharp rise in Demat accounts and digital investment participation in recent years; however, limited empirical evidence exists regarding how Indian retail investors interact with AI-integrated mobile stock trading applications. Subsequent investigations could uncover more viable remedies and offer more profound understanding of the effective and conscientious implementation of AI-powered trading technology. In this regard, comparative and longitudinal research may also offer important insights into shifting investor perspectives and behaviour across various market circumstances and demographic groups. In order to comprehend the behavioural, psychological, technological, and financial elements driving retail investors' use of mobile trading platforms in the Indian setting, further context-specific research is required (Grima et al., 2021).

Overall, the review's results show that the field of AI-enabled mobile stock trading apps is still developing and has significant chances for further theoretical and empirical development. In future, across the globe, retail investment behaviour may change as AI is increasingly incorporated into mobile investing platforms. Further improved regulatory

frameworks by increasing investor awareness, AI literacy and providing more comprehensive empirical research on post-adoption investment behaviour and long-term investor outcomes, are necessary for this sector to flourish sustainably.

6. LIMITATION OF THE STUDY

Although the current study contributes thorough bibliometric and thematic insights into mobile stock trading apps with AI capabilities, considerable limitations should be acknowledged. First, as the Scopus database comprises a wide range of research articles in business and management disciplines, the study is mostly focused on publications that are indexed in the Scopus database only. Further study may make use of resources such as Web of Science, JSTOR, and ProQuest to expand the document pool and enhance research coverage. Secondly, bibliometric analysis mainly captures publication trends, citation structures, and thematic evolution. However, It might not fully explain the practicality or behavioural outcomes of AI-enabled trading platforms. Furthermore, the overall results primarily rely on the keywords, search strings, and inclusion exclusion criteria chosen, which could affect the range of retrieved material. Lastly, new research dimensions may develop beyond the era covered in this analysis due to the continuously growing nature of fintech ecosystems and AI technology.

7. IMPLICATIONS

7.1 Practical Implications

The study's findings have several practical implications for legislators, fintech companies, mobile trading platform developers, and financial institutions. The study affirms the rising significance of AI-enabled features to improve decision-making efficacy and investor engagement, mainly automated portfolio management, personalised investment recommendation, predictive analytics, and robo-advisory services. This information could be used by fintech companies and neo-broker platforms to create trading applications that are more accessible, transparent, safe, and user-centric for individual investors. According to the study, investor confidence and ethical investing behavior can be enhanced by raising financial literacy, AI awareness, and digital investment education. These findings could be used by policymakers and regulatory bodies to create more robust regulatory frameworks concerning algorithmic transparency, investor protection, AI governance, data privacy, and ethical financial practices in digital investing settings.

7.2 Social implication

The growing use of AI-powered mobile trading apps has wider social ramifications for digital economic engagement and financial inclusion By lowering entry barriers and transaction costs, mobile trading platforms have increased access to investment

options for young investors, first-time investors, and people from semi-urban and rural areas By increasing retail participants' access to financial instruments and investment expertise, the incorporation of AI into financial services can help democratize investing. However, unskilled investors may also become financially vulnerable due to overreliance on AI-generated suggestions, overtrading, algorithmic bias, false information, and a lack of financial literacy.

The review's overall conclusions indicate that the field of AI-enabled mobile stock trading applications is still developing and has significant chances for further theoretical and empirical development. Globally, retail investing may change as a result of the growing integration of AI into mobile investing platforms. However, balanced growth in this area calls for more robust regulatory frameworks, increased investor awareness, ethical AI governance, and in-depth empirical research on post-adoption investment behaviour and long-term investor outcomes.

CREDIT AUTHOR STATEMENT

Amit & Vibhuti has contributed to conceptualization and data analysis. Amit & Vibhuti was responsible for conceptualization and writing the original draft. Amit & Vibhuti handled the research methodology. Amit & Vibhuti contributed through literature search and writing – review and editing. Amit & Vibhuti was responsible for preparing tables, graphs, bibliometric maps, and draft refinement.

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REFERENCES

Adrianto, F., & Hamidi, M. (2020). ANALYSIS OF RETAIL INVESTMENT BEHAVIOUR IN INDONESIAN STOCK MARKET. *Academy of Accounting and Financial Studies Journal*, *24*, 1–13. https://scholar.google.com/scholar?hl=en&as_sdt=0%2C5&q=.+%5BANALYSIS+OF+RETAIL+INVESTMENT+BEHAVIOUR+IN+INDONESIAN+STOCK+MARKET%5D&btnG=.

Ahmad, U., Van Keulen, M., Briassouli, A., & Saad, M. (2025). Cognitive biases, Robo advisor and investment decision psychology: An investor's perspective from New York stock exchange. *Acta Psychologica*, *256*. https://doi.org/10.1016/j.actpsy.2025.105048

Ahuja, P., Gupta, M., Jain, J., Sood, K., & Vardari, L. (2025). HR Analytics Research

Landscape (2003–2024): A Systematic, Bibliometric, and Content Analysis. *Journal Of Economic Sciences: Theory And Practice*, *82*(2), 4–31. https://doi.org/10.30546/jestp.2025.82.02.2005

Akram, R., Shi, X., Khalid, F., & Srivastava, M. (2025). Artificial Intelligence (AI) Adoption and Green Investment: Driving Corporate Environmental Responsibility. *Business Strategy and the Environment*, *34*(7), 9188–9202. https://doi.org/10.1002/bse.70069

Antoncic, M. (2020). Uncovering hidden signals for sustainable investing using big data: Artificial intelligence, machine learning and natural language processing. *Journal of Risk Management in Financial Institutions*, *13*(2), 106–113. https://doi.org/10.69554/cikj7477

Arslan, M. & Kekeç, H. M. (2023). Health Financing in the Pursuit of Sustainable Development Goals: An Examination of Global Averages and Turkey's Position. Oppor Chall. Sustain., 2(3), 141-147. https://doi.org/10.56578/ocs020303

Ashraful Alam, S. M., Akter, R., Khan, S. N., & Ahmad, S. (2025). FinTech: A new financial revolution. In *Financial Landscape Transformation: Technological Disruptions* (pp. 301–316). Emerald Publishing. https://doi.org/10.1108/978-1-83753-750-120251017

Ashta, A., & Herrmann, H. (2021). Artificial intelligence and fintech: An overview of opportunities and risks for banking, investments, and microfinance. *Strategic Change*, *30*(3), 211–222. https://doi.org/10.1002/jsc.2404

Bala, R., Singh, S., Sood, K., & Grima, S. (2025). SUSTAINABLE FINANCE AND INVESTMENT ANALYTICS: A SYSTEMATIC LITERATURE REVIEW AND META-ANALYSIS APPROACH. *Journal Of Economic Sciences: Theory And Practice*, *82*(1), 89–106. https://doi.org/10.30546/jestp.2025.82.01.091

Bhatia, A., Chandani, A., Divekar, R., Mehta, M., & Vijay, N. (2022). Digital innovation in wealth management landscape: the moderating role of robo advisors in behavioural biases and investment decision-making. *International Journal of Innovation Science*, *14*(3–4), 693–712. https://doi.org/10.1108/IJIS-10-2020-0245

Bhopal, R., & Devi, R. (2023). Emotional intelligence for effective leadership: Future research trends using bibliometric analysis. In *AI and Emotional Intelligence for Modern Business Management* (pp. 48–63). https://doi.org/10.4018/979-8-3693-0418-1.ch004

Bhopal, R., Nazma, N., & Devi, R. (2025). Post-COVID-19: leveraging digital payment services for a sustainable future through bibliometric analysis. *IIMT Journal of Management*, *2*(2), 217–232. https://doi.org/10.1108/IIMTJM-07-2024-0077

Brunen, A.-C., & Laubach, O. (2022). Do sustainable consumers prefer socially responsible investments? A study among the users of robo advisors. *Journal of Banking & Finance*, *136*, 106314. https://doi.org/https://doi.org/10.1016/j.jbankfin.2021.106314

Chong, L. L., Ong, H. B., & Tan, S. H. (2021). Acceptability of mobile stock trading application: A study of young investors in Malaysia. *Technology in Society*, *64*. https://doi.org/10.1016/j.techsoc.2020.101497

Coggiola, N. (2024). Directive 23/2673/EU Addresses Risks From Mobile Investment Applications. *European Review of Private Law*, *32*(4), 653–678. https://doi.org/10.54648/erpl2024031

D'Acunto, F., Prabhala, N., & Financial, A. R. (2019). The promises and pitfalls of robo-advising. *The Review of Financial Studies* . https://academic.oup.com/rfs/article-abstract/32/5/1983/5427774

Dhingra, B., Yadav, M., Saini, M., & Mittal, R. (2024). A bibliometric visualization of behavioral biases in investment decision-making. In *Qualitative Research in Financial Markets* (Vol. 16, Number 3, pp. 503–526). Emerald Publishing. https://doi.org/10.1108/QRFM-05-2022-0081

Eren, B. A. (2024). Antecedents of robo-advisor use intention in private pension investments: an emerging market country example. *Journal of Financial Services Marketing*, *29*(3), 683–698. https://doi.org/10.1057/s41264-023-00229-5

Faradynawati, I. A. A., & Söderberg, I. L. (2022). Sustainable Investment Preferences among Robo-Advisor Clients. *Sustainability (Switzerland)*, *14*(19). https://doi.org/10.3390/su141912636

Foffano, F., Scantamburlo, T., & Cortés, A. (2022). Investing in AI for social good: an analysis of European national strategies. *AI & SOCIETY 2022 38:2*, *38*(2), 479–500. https://doi.org/10.1007/S00146-022-01445-8

Grima, S., Kizilkaya, M., Sood, K., & ErdemDelice, M. (2021). *The perceived effectiveness of blockchain for digital operational risk resilience in the European Union insurance market sector*. *Journal of Risk and Financial Management, 14*(8), 363. https://doi.org/10.3390/jrfm14080363

Gayatri, P. G., & Kurniawan, Y. (2024). Analysis of interest in using investment application platforms as a means of mutual fund investment among Gen Z and Gen Millennials. *Edelweiss Applied Science and Technology*, *8*(6), 6051–6063. https://doi.org/10.55214/25768484.v8i6.3320

G. W. Xu, Ali, D. A., Bhaumik, A., Yang, M. S., & Wang, N. (2023). The Influence of Digital Transformation in Enterprises on the Dynamics of Supply Chain Concentration: An Empirical Analysis of Chinese A-Share Listed Companies. J. Organ. Technol. Entrep., 1(2), 88-97. https://doi.org/10.56578/jote010202

Hadi Putra, P. O., Nugroho, S., & Hidayanto, A. N. (2022). Factors Affecting User Retention of Mobile Mutual Fund Investment Applications: Evidence from Indonesia. *Human Behavior and Emerging Technologies*, *2022*. https://doi.org/10.1155/2022/7521680

Hassan, S. T., & Hassan, M. U. (2025). Assessing the dynamics of artificial intelligence, renewable energy investment, and policy uncertainty in promoting green growth in China. *Energy Reports*, *14*, 2015–2030. https://doi.org/10.1016/j.egyr.2025.08.020

Hong, X., Pan, L., Gong, Y., & Chen, Q. (2023). Robo-advisors and investment intention: A perspective of value-based adoption. *Information and Management*, *60*(6), 103832. https://doi.org/10.1016/j.im.2023.103832

Horani, H. U. R., Amin, M., & Ahmed, F. (2025). CLIMATE RISK INSURANCE: BIBLIOMETRIC REVIEW ON PRESENT, PAST AND FUTURE. *Journal Of Economic Sciences: Theory And Practice*, *82*(1), 4–18. https://doi.org/10.30546/jestp.2025.82.01.04

Hyun Baek, T., & Kim, M. (2023a). Ai robo-advisor anthropomorphism: The impact of anthropomorphic appeals and regulatory focus on investment behaviors. *Journal of Business Research*, *164*, 114039. https://doi.org/10.1016/j.jbusres.2023.114039

Hyun Baek, T., & Kim, M. (2023b). Ai robo-advisor anthropomorphism: The impact of anthropomorphic appeals and regulatory focus on investment behaviors. *Journal of Business Research*, *164*. https://doi.org/10.1016/j.jbusres.2023.114039

Imran, M. & Rehman, Z. U. (2024). Interplay of Government Support and Foreign Investment in Enhancing R&D in China's Strategic Sectors. J. Organ. Technol. Entrep., 2(1), 1-13. https://doi.org/10.56578/jote020101

Jain, J., Walia, N., Singh, S., & Jain, E. (2022). Mapping the field of behavioural biases: a literature review using bibliometric analysis. *Management Review Quarterly*, *72*(3), 823–855. https://doi.org/10.1007/s11301-021-00215-y

Jayatu Sen Chaudhury, & Akhter M. Rather. (2025). *The reality of Indian trading boom: Platforms win, retail investors lose | Mint*. https://www.livemint.com/money/personal-finance/indian-trading-boom-demat-accounts-retail-investors-f-o-trading-futures-and-options-discount-brokers-platforms-apps-11744188239444.html

Inder, S., Sood, K., & Grima, S. (2022). *Antecedents of behavioural intention to adopt internet banking using structural equation modelling*. Journal of Risk and Financial Management, 15(4), 157. https://doi.org/10.3390/jrfm15040157

Kaur, S., Kumar, R., Singh, K., & Huang, Y. L. (2024). Leveraging Artificial Intelligence for Enhanced Sustainable Energy Management. J. Sustain. Energy, 3(1), 1-20. https://doi.org/10.56578/jse030101

Khanra, S., Dhir, A., Islam, N., & Mäntymäki, M. (2020). Big data analytics in healthcare: a systematic literature review. *Enterprise Information Systems*, *14*(7), 878–912. https://doi.org/10.1080/17517575.2020.1812005

Khanra, S., Dhir, A., & Mäntymäki, M. (2020). Big data analytics and enterprises: a bibliometric synthesis of the literature. *Enterprise Information Systems*, *14*(6), 737–768. https://doi.org/10.1080/17517575.2020.1734241

Kou, G., Dinçer, H., Eti, S., Pamucar, D., Yüksel, S., Ergün, E., & Acar, M. (2025). A novel artificial intelligence-based fuzzy decision-making approach to carbon capture technology investment performance. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-025-06209-0

Lui, A. K. H., Lee, M. C. M., & Ngai, E. W. T. (2022). Impact of artificial intelligence investment on firm value. *Annals of Operations Research*, *308*(1), 373–388. https://doi.org/10.1007/s10479-020-03862-8

Luo, H., Liu, X., Lv, X., Hu, Y., & Ahmad, A. J. (2024). Investors' willingness to use robo-advisors: Extrapolating influencing factors based on the fiduciary duty of investment advisors. *International Review of Economics and Finance*, *94*. https://doi.org/10.1016/j.iref.2024.103411

Mammadova, N. (2023). THE EFFECT OF INVESTMENT DECISIONS ON FIRMS' PROFITABILITY (EMPIRICAL STUDY ON LISTED COMPANIES). *Journal Of Economic Sciences: Theory And Practice*, *80*(1), 106–118.

Mendoza, M. C. O., Servas, P. J., Ibrahim, Z. K., Gemala, K. C., Base, T. J., Diaz, J. F. T., & Ong, A. K. S. (2025). A Sustainable Investment: Fintech evaluation and actual use analysis of online stock trading platforms. *Computers and Industrial*

Engineering, *206*, 111220. https://doi.org/10.1016/j.cie.2025.111220

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2010). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *International Journal of Surgery*, *8*(5), 336–341. https://doi.org/10.1016/j.ijsu.2010.02.007

NSE. (2026). *Corporate Communications*. https://www.nseindia.com/mediacoverage/investor-accounts-at-nse-cross-25-crore-250-million?utm_source=chatgpt.com

Panakaje, N., Parvin, S. M. R., Sheikh, N., Irfana, S., Madhura, K., Raj, J., & Soubhari, T. (2025). ROBO-ADVISORS AND INVESTMENT DECISIONS: ASSESSING THE IMPACT OF THE "SNAKEBITE" EFFECT AND SOCIAL-EMOTIONAL WELL-BEING & RESILIENCE. *Investment Management and Financial Innovations*, *22*(1), 453–468. https://doi.org/10.21511/imfi.22(1).2025.34

Phan, T. A., Tran, H. P., Ninh, T. T., & Nguyen, H. K. (2025). "Hey AI, should I buy this stock?" – Trust, technology, and the rise of the young investor. *Strategic Business Research*, *1*(1), 100014. https://doi.org/10.1016/j.sbr.2025.100014

Restuputri, D. P., Refoera, F. B., & Masudin, I. (2023). Investigating Acceptance of Digital Asset and Crypto Investment Applications Based on the Use of Technology Model (UTAUT2). *FinTech*, *2*(3), 388–413. https://doi.org/10.3390/fintech2030022

Saraçlı, S., Tunca, B., Gül, I., Arı, E., Villi, B., Berk, B. I., Berk, I., & Boca, G. D. (2023). Modeling the Influences on Sustainable Attitudes of Students Towards Environmental Challenges: A Partial Least Squares- Structural Equation Modelling Approach. Oppor Chall. Sustain., 2(3), 161-171. https://doi.org/10.56578/ocs020305

S Parsheera. (2022). Understanding state-level variations in India's digital transformation. *The African Journal of Information and Communication*, (30). https://doi.org/10.23962/AJIC.I30.15082

Sembel, J., Widjaja, A., Marketing, F. A.-M. &, & 2024, U. (2024). Determinants of mobile stock investment application adoption and its impact on intention to recommend the applications in emerging countries: a case study of. *Management & Marketing*, *19*(3), 555–578. https://doi.org/10.2478/mmcks-2024-0025

Shanmuganathan, M. (2020). Behavioural finance in an era of artificial intelligence: Longitudinal case study of robo-advisors in investment decisions. *Journal of Behavioral and Experimental Finance*, *27*, 100297. https://doi.org/10.1016/j.jbef.2020.100297

Shen, L., Jin, Y., & Xue, Q. (2025). Artificial intelligence and corporate investment efficiency. *Finance Research Letters*, *85*, 108050. https://doi.org/10.1016/J.FRL.2025.108050

Si Mohammed, K., Serret, V., Ben Jabeur, S., & Nobanee, H. (2024). The role of artificial intelligence and fintech in promoting eco-friendly investments and non-greenwashing practices in the US market. *Journal of Environmental Management*, *359*(February), 120977. https://doi.org/10.1016/j.jenvman.2024.120977

Tai, Y., research, Y. K.-J. of electronic commerce, & 2013, undefined. (2013). Will stock investors use mobile stock trading? A benefit-risk assessment based on a modified UTAUT model. *Ojs.Jecr.OrgYM Tai, YC KuJournal of Electronic Commerce Research, 2013•ojs.Jecr.Org*, *14*. http://ojs.jecr.org/jecr/sites/default/files/14_01_p5.pdf

Tania, J., & Tjhin, V. U. (2025). THE INFLUENCE OF DIGITAL LITERACY ON INTENTION TO USE INVESTMENT APPLICATIONS IN GENERATION Z: A CASE STUDY ON FINANCIAL PRODUCTS. *Journal of Theoretical and Applied Information Technology*, *103*(7), 2903–2916. http://www.jatit.org/volumes/Vol103No7/23Vol103No7.pdf

Tao, R., Su, C. W., Xiao, Y., Dai, K., & Khalid, F. (2021). Robo advisors, algorithmic trading and investment management: Wonders of fourth industrial revolution in financial markets. *Technological Forecasting and Social Change*, *163*. https://doi.org/10.1016/j.techfore.2020.120421

The Economic Times, M. (2025, November). *20 crore Demat accounts and counting: Inside India's retail investing transformation - The Economic Times*. https://economictimes.indiatimes.com/markets/stocks/news/20-crore-demat-accounts-and-counting-inside-indias-retail-investing-transformation/articleshow/125517942.cms

Uhl, M. W., & Rohner, P. (2018). Robo-advisors versus traditional investment advisors: An unequal game. *The Journal of Wealth Management*, *21*(1), 44.

Wang, Q., Sun, T., & Li, R. (2025). Does Artificial Intelligence (AI) enhance green economy efficiency? The role of green finance, trade openness, and R&D investment. *Humanities and Social Sciences Communications*, *12*(1). https://doi.org/10.1057/s41599-024-04319-0

Yang, M., & Rau, P. L. P. (2024). Trust building with artificial intelligence: comparing with human in investment behaviour, emotional arousal and neuro activities. *Theoretical Issues in Ergonomics Science*, *25*(5), 593–614.

https://doi.org/10.1080/1463922X.2023.2290019

Zhao, X., Zhai, G., Charles, V., Gherman, T., Lee, H., Pan, T., & Shang, Y. (2024). Enhancing enterprise investment efficiency through artificial intelligence: The role of accounting information transparency. *Socio-Economic Planning Sciences*, *96*. https://doi.org/10.1016/j.seps.2024.102092