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Robo-Advisors as a FinTech Disruption: A Bibliometric Analysis

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ABSTRACT

Purpose: The study aims to provide a comprehensive bibliometric analysis of robo-advisory research to map its intellectual structure, thematic evolution, and emerging trends within the FinTech ecosystem.

Design/Methodology/Approach A dataset of 459 Scopus-indexed publications from 2014 to 2025 was analysed using Biblioshiny (R) and VOSviewer. The analysis covered performance analysis, co-occurrence networks, thematic mapping, and citation analysis to identify influential authors, sources, and research clusters.

Findings: The results reveal a sharp increase in publications after 2018, reflecting rising academic and growing interest in AI-driven financial services. India, the United States, and China lead in research output, while the United States exhibits the highest citation impact. Thematic mapping highlights two dominant research streams: (1) technology-focused themes such as AI, machine learning, and blockchain, and (2) user-centric themes like trust, financial literacy, and adoption behaviour. Emerging topics include algorithmic transparency, explainability, and personalised advisory solutions.

Originality/value: This study consolidates a fragmented body of literature into an organised knowledge structure, providing actionable insights for academics, practitioners, and policymakers. It identifies thematic gaps and future research opportunities in behavioural aspects, regulatory frameworks, and ethical considerations in robo-advisory services.

Paper Type: Review of Literature

KEYWORDS: Robo-advisor | Robo-advisory services | FinTech | Artificial intelligence | Bibliometric analysis | Thematic mapping, VOSviewer

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Introduction

The financial services sector has experienced profound technological transformation over the past two decades. Innovations such as artificial intelligence (AI), blockchain, and big data analytics have disrupted conventional banking and investment practices, enabling faster processes, cost efficiency, and enhanced customer experience (Allen et al., 2021; Gomber et al., 2018). Within this wave of digital change, the rise of financial technology (FinTech) has been widely recognized as a disruptive force, reshaping traditional financial services and challenging established models of banking and advisory practices.

Among the many innovations within FinTech, robo-advisory services stand out as one of the most significant developments in the financial ecosystem. Robo-advisors are digital platforms that provide automated, algorithm-based investment advice with minimal human supervision. These platforms leverage AI, machine learning, and algorithmic models to provide automated investment recommendations at comparatively lower costs than traditional human advisors (Jung et al., 2018). By reducing entry barriers, robo-advisors have expanded access to financial planning, making it affordable and inclusive for diverse investor groups, including individuals with limited financial literacy or smaller investment capacities. Several studies have explored factors influencing adoption, highlighting the role of perceived usefulness, trust, and ease of use, along with socio-demographic characteristics such as age and gender (Belanche et al., 2019; Hildebrand & Bergner, 2021). Moreover, the incorporation of conversational interfaces and AI-driven personalization has further improved user engagement and trust, reflecting a gradual transition toward more intelligent and user-centric advisory systems (Hildebrand & Bergner, 2021).

At the same time, FinTech disruption extends well beyond robo-advisory. Recent studies show that FinTech innovations have not only transformed firm performance and labour demand but also created new opportunities through the integration of finance and technology skills (Jiang et al., 2025). However, disruption alone may not ensure sustainable competitiveness, as firms also require effective governance, operational efficiency, and collaborative strategies to thrive in dynamic markets (Issami & Tandamba, 2025). Complementing this, bibliometric evidence highlights how FinTech disruption in traditional banking has accelerated since 2020, driven by digital transformation and the adoption of AI-powered financial services (Judijanto, 2025). Within this broader landscape of disruption, robo-advisors represent a prominent manifestation of technology-driven innovation, redefining wealth management and reshaping investor behaviour.

Despite this growing interest, research on robo-advisory services remains fragmented across multiple disciplines, including finance, technology, and consumer behaviour (Zhang et al., 2021). This fragmentation makes it difficult to trace how technological, behavioural, and financial aspects intersect in shaping the adoption and evolution of robo-advisory services. While prior work has examined adoption intentions, design considerations, and trust-building mechanisms (Belanche et al., 2019; Flavián et al., 2022), other studies have focused on technical advancements, such as improving recommendation accuracy and real-time adaptability through AI models (Hu et al., 2025). Recent contributions have also emphasized behavioural dimensions, such as incorporating biases like loss aversion or mental accounting into advisory algorithms to enhance decision-making effectiveness (Banerjee et al., 2025). Evidence further suggests that while the key factors behind both traditional and digital investment advice are largely the same, the way they are applied differs, and this can shape how investors trust, value, and decide to adopt robo-advisors. (Luo et al., 2024; Wagner, 2024)

Although these insights are valuable, they are scattered and lack a consolidated overview that can map the intellectual structure and thematic progression of this domain. To address this gap, this study conducts a comprehensive bibliometric analysis of robo-advisory research to examine its growth patterns, intellectual foundations, and thematic evolution. Bibliometric techniques are increasingly recognized for their ability to provide a structured and objective overview of large bodies of literature, enabling the identification of key authors, sources, influential documents, and emerging research themes (Gomber et al., 2018). Unlike traditional narrative reviews, this approach uses quantitative measures and visualisation tools to reveal knowledge structures and research trajectories, offering actionable insights for both academics and practitioners.

Research Objectives

Accordingly, this paper focuses on the following research objectives:

1. To analyse publication and citation trends in robo-advisory literature.
2. To identify the most influential countries, authors, and journals contributing to this field.
3. To examine thematic clusters and map the intellectual structure of existing research.
4. To highlight emerging themes and future research directions in robo-advisory studies.

By fulfilling these objectives, the study contributes to a systematic bibliometric mapping of robo-advisory research using Scopus-indexed publications from 2014 to 2025. The findings aim to assist scholars in understanding the conceptual development of this field and guide future inquiries into AI-driven financial advisory systems.

Screening and Inclusion Flowchart

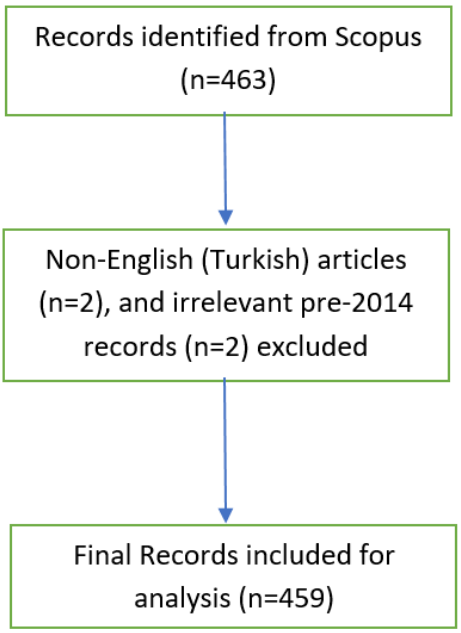

Figure 1: Screening and inclusion flowchart

Source: Author's own creation

Research Design and Methodology

This study adopts a descriptive bibliometric research design. The dataset was retrieved from the **Scopus** database, which is widely recognised for its extensive coverage of peer-reviewed literature and suitability for bibliometric analysis. Scopus was selected due to its reliability and comprehensive indexing of high-quality journals in the fields of finance, technology, and management.

The search strategy employed the following query:

(title-abs-key("roboadvisor*" OR "robo-advisor*" OR "digital advisor*" OR "automated advisor*" OR "ai based advisor*" OR "algorithm advisor*") AND title-abs-key("financ*" OR "invest*")) AND (exclude (language, "turkish"))

This study employed a carefully structured search strategy to include publications specifically focused on robo-advisory services within financial and investment domains. An initial dataset of 463 documents was retrieved from the Scopus database. During the screening phase, four records were excluded: two non-English (Turkish) articles and two pre-2014 documents that lacked direct relevance. Consequently, a total of 459 English-language articles were retained for bibliometric analysis. The screening process is visually summarized in **Figure 1**, as follows:

- Records identified from Scopus: **463**
- Records excluded (non-English and pre-2014): **4**
- Final records included for analysis: **459**

For data analysis, two widely adopted tools were utilized: **Biblioshiny** (R-based interface) for performance indicators and thematic mapping, and **VOSviewer** for generating co-authorship, country collaboration, and keyword co-occurrence networks. These tools are well established in bibliometric research for producing reliable and visually interpretable outputs.

Data Analysis and Interpretation

Performance Analysis

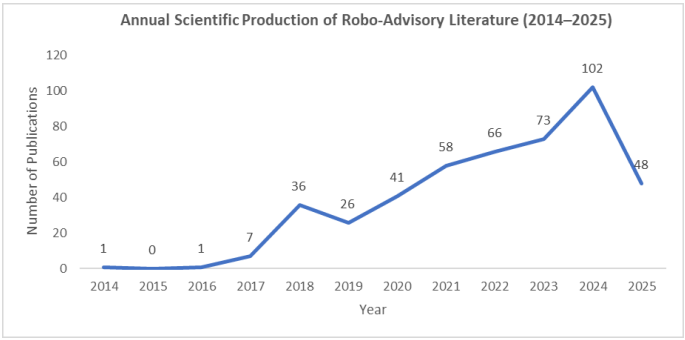

Figure 2: Annual publication trend in robo-advisory research (2014–2025)

Source: Author's own creation using Scopus data (2014–2025)

Annual Publication Trend

Figure 2 illustrates the annual scientific production on robo-advisory literature from 2014 to 2025. The trend reveals a clear growth trajectory, indicating rising academic interest in this domain. The first publication appeared in 2014, followed by negligible output until 2016. A gradual increase began in 2017 with seven publications, and a significant surge occurred in 2018 with 36 papers. Although there was a slight decline in 2019 (26 papers), the field regained momentum, reaching 58 publications in 2021 and 66 in 2022.

The most remarkable growth occurred between 2022 and 2024, peaking at 102 publications in 2024, which marks the highest annual output in the dataset. This sharp increase aligns with the global emphasis on digital finance, AI integration, and automation in financial services during this period. The slight decline in 2025 (48 papers) can be attributed to the partial data availability for the ongoing year, a common trend in bibliometric studies.

Overall, the trend demonstrates that robo-advisory services have transitioned from an emerging topic to a well-established research area, driven by technological advancements and growing interest in AI-based financial solutions.

Top Sources

Table 1: Top journals publishing in this domain

Sources	Articles
Robo-advisors in management	10
Communications in computer and information science	9
Lecture notes in networks and systems	9
Sustainability (switzerland)	8
Finance research letters	6
Financial planning review	6
Frontiers in artificial intelligence	6
Journal of behavioural and experimental finance	6
Lecture notes in computer science (including subseries lecture notes in artificial intelligence and lecture notes in bioinformatics)	6
Ceur workshop proceedings	5

Source: Author's analysis using Scopus data (2014–2025)

Table 1 lists the most productive journals in robo-advisory research. The journal *Robo-Advisors in Management* leads with 10 publications, highlighting its specialized focus on automated financial advisory systems. *Communications in Computer and Information Science* and *Lecture Notes in Networks and Systems* follow closely with 9 articles each, indicating strong contributions from technology-oriented outlets. The presence of *Sustainability (Switzerland)* with 8 papers suggests an increasing emphasis on sustainable finance and responsible investing within robo-advisory literature. Notably, finance-focused journals such as *Finance Research Letters* and *Journal of Behavioural and Experimental Finance* also appear among the top sources, reflecting the multidisciplinary nature of this domain, bridging financial theory, behavioural insights, and technological innovation.

Table 2: Top 10 Most Cited Documents in Robo-Advisory Research

Authors	Title	Journal	Year	Citation
Gomber et al.	On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services	Journal of Management Information Systems	2018	1121
Belanche et al.	Artificial Intelligence in FinTech: understanding robo-advisors adoption among customers	Industrial Management and Data Systems	2019	471
Flavián et al.	Intention to use analytical artificial intelligence (AI) in services – the effect of technology readiness and awareness	Journal of Service Management	2022	240
Allen et al.	A Survey of Fintech Research and Policy Discussion	Review of Corporate Finance	2021	172
Jung et al.	Robo-Advisory: Digitalization and Automation of Financial Advisory	Business and Information Systems Engineering	2018	167
Hildebrand et al.	Conversational robo advisors as surrogates of trust: onboarding experience, firm perception, and consumer financial decision making	Journal of the Academy of Marketing Science	2021	139
Jung et al.	Designing a robo-advisor for risk-averse, low-budget consumers	Electronic Markets	2018	139
Brenner et al.	Robo-advisors: A substitute for human financial advice?	Journal of Behavioral and Experimental Finance	2020	123
Zhang et al.	Who do you choose? Comparing perceptions of human vs robo-advisor in the context of financial services	Journal of Services Marketing	2021	110
Tao et al.	Robo advisors, algorithmic trading and investment management: Wonders of fourth industrial revolution in financial markets	Technological Forecasting and Social Change	2021	108

Source: Author's analysis using Scopus data (2014–2025)

Table 2 summarizes the top 10 most cited documents in robo-advisory research, reflecting the foundational contributions to this domain. Gomber et al. (2018) ranks first with 1,121 citations in the *Journal of Management Information Systems*, providing a seminal discussion on the FinTech revolution and its implications for financial services. Belanche et al. (2019) follows with 471 citations, focusing on artificial intelligence applications in robo-advisory adoption. Flavián et al. (2022) stands out as a recent high-impact study, addressing user intention toward AI-based services, indicating the growing importance of analytical AI in financial contexts.

Other influential works include Allen et al. (2021), which offers a policy-oriented perspective on FinTech research, and (Jung et al., 2018), examining the digitalization of financial advisory systems. Contributions by Hildebrand et al. (2021) and Brenner et al. (2020) emphasize trust and substitution effects in robo-advisory adoption, while (Belanche et al., 2019) explores user perceptions of human versus algorithmic advisors. The thematic diversity of these studies, from technology adoption and behavioural aspects to policy discussions, highlights the interdisciplinary nature of robo-advisory research and its integration with AI-driven innovation in finance.

Figure 3 highlights the most prolific authors in robo-advisory research based on the number of published documents. *Kobets V* leads significantly with 12 publications, indicating a strong research focus and consistent contributions to the domain. *Bhatia A* and *Chandani A* follow with 8 publications each, while *Jung D* ranks next with 7 papers, reflecting their active engagement in the field. Other notable contributors include *Divekar R*, *Giudici P*, *Glaser F*, *Horn M*, *Savchenko S*, and *Scherer B*, each with 4 publications. The distribution suggests a moderately concentrated authorship pattern, with a few scholars producing substantial research output, supported by a wider base of contributing authors. This trend aligns with the multidisciplinary nature of robo-advisory studies, drawing expertise from finance, technology, and behavioural science.

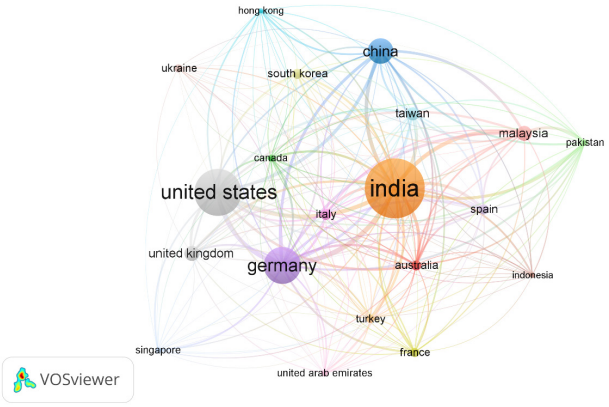

Figure 4: Country-wise Co-authorship Network in Robo-Advisory Research

Source: Author's own creation using Scopus data (2014–2025)

Top Authors

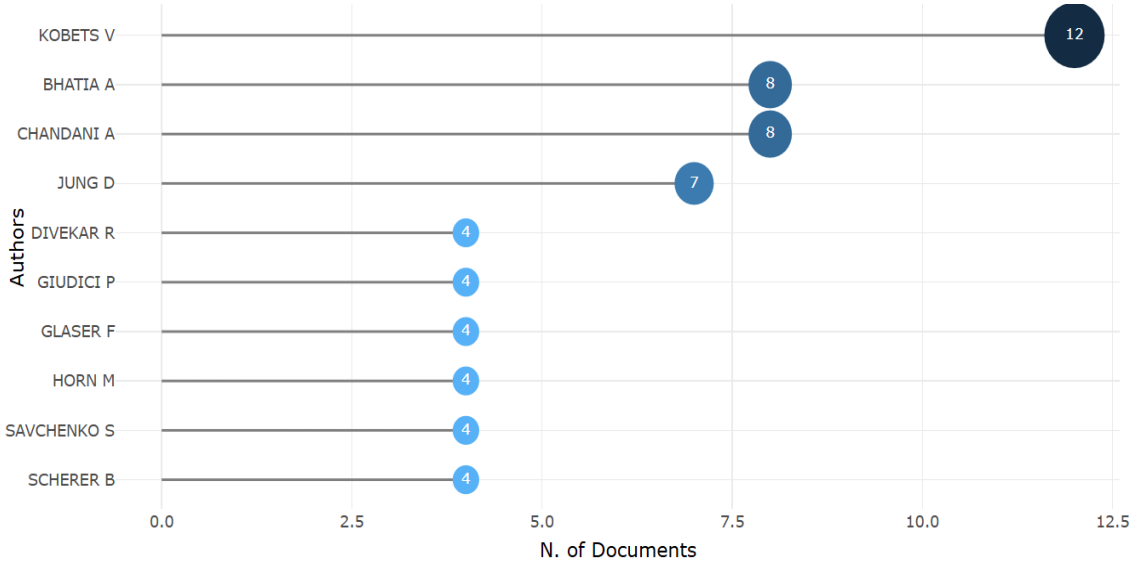

Figure 3: Authors with highest number of publications

Source: Author's own creation using Scopus data (2014–2025),

Figure 4 represents the co-authorship network among countries in the robo-advisory research domain, while Table 1 shows the top publishing nations by frequency of documents. The size of each node in the network map corresponds to the number of publications from that country, and the connecting lines indicate collaborative research ties.

Table 3: Top Publishing Countries in Robo-Advisory Research

Country	Number of Publications
India	237
USA	158
China	155
Germany	120
Malaysia	58
South Korea	44
Italy	32
Ukraine	32
Spain	30
UK	30

Source: Author's analysis using Scopus data (2014–2025)

From **Table 3**, it is evident that India leads with the highest number of publications (237), followed by the United States (158) and China (155). Germany (120) and Malaysia (58) also appear as key contributors, while countries like South Korea, Italy, Ukraine, Spain, and the United Kingdom exhibit moderate research output.

The visualization further reveals strong collaboration patterns, particularly among India, the United States, and China, which dominate the network as the largest nodes. India's position at the centre of the map indicates its pivotal role in connecting multiple research clusters, highlighting its growing prominence in FinTech and robo-advisory studies. These dense interconnections signify the globalized nature of this field, with emerging collaborations extending to Europe and Asia.

Country Analysis

Tables 3 and 4 summarize the top publishing and most influential countries based on publication count and citations, respectively.

Table 4: Top Ten Most Influential Countries Based on Citations

Country	Total Citations	Average Article Citations
USA	1646	54.90
Germany	994	34.30
Spain	761	76.10
China	583	15.30
India	312	9.50
Italy	251	19.30
Malaysia	162	10.80
Korea	141	11.80
Switzerland	140	70.00
France	125	17.90

Source: Author's analysis using Scopus data (2014–2025)

The collaboration network (Figure 4) reveals that India and the United States occupy central positions, signifying their leading role in research productivity and global partnerships. India's prominence reflects the growing FinTech ecosystem and rapid digitalization in emerging economies, whereas the USA's leadership can be attributed to its advanced financial infrastructure and strong academic-industry linkages.

In terms of influence, the USA consistently records the highest citation impact, suggesting that its research output not only dominates in volume but also shapes the intellectual foundation of the field. Other notable contributors include China, the United Kingdom, and Germany, which maintain significant research presence and collaborative ties. The dense interconnections among European nations and active linkages between Asian and Western countries underscore the globalized nature of this research domain.

Overall, the analysis indicates that robo-advisory research is highly collaborative, with strong cross-border partnerships fostering knowledge exchange and technological innovation. This pattern reflects the interdisciplinary and international scope of robo-advisory studies, driven by financial digitalization trends worldwide.

Science Mapping

Keyword Analysis

Figure 5 illustrates the keyword co-occurrence network generated through VOSviewer, while **Table 5** summarizes the most frequently used terms in robo-advisory literature based on occurrence and total link strength. The visualization reveals multiple clusters that collectively define the intellectual structure of this research domain.

The keyword co-occurrence analysis reveals three dominant thematic clusters in robo-advisory research.

Cluster 1 (Green – Core Adoption and Financial Context): This largest cluster revolves around *robo-advisor*, strongly linked with technology adoption, investment, finance, UTAUT, wealth management, and trust. It reflects how existing research often frames robo-advisory services through technology adoption theories, while simultaneously examining behavioural aspects such as trust and their integration into wealth management and investment practices.

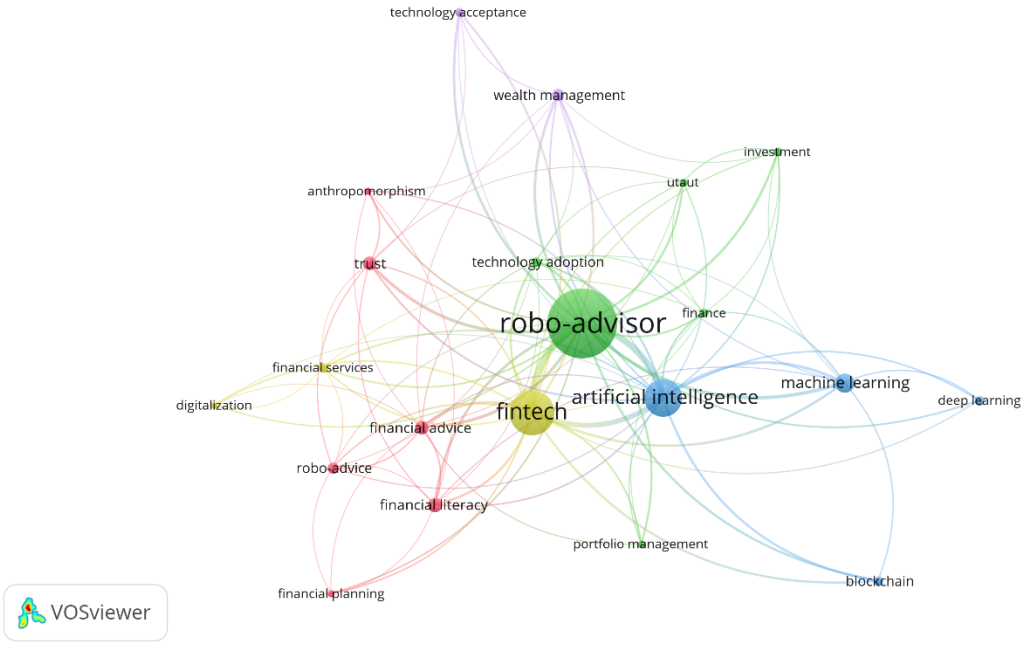

Figure 5: Network analysis of keywords in robo-advisory research

Source: Author's own creation using Scopus data (2014–2025)

Table 5: Prominent research topics identified through keyword citations

Sr. No.	Keyword	Occurrences	Total link strength
1	artificial intelligence	103	188
2	decision making	31	68
3	finance	33	63
4	financial literacy	25	41
5	financial markets	23	44
6	fintech	123	196
7	investments	80	145
8	machine learning	36	79
9	robo-advisor	239	304
10	wealth management	23	48

Source: Author's analysis using Scopus data (2014–2025)

Cluster 2 (Yellow – FinTech Integration and Service Delivery): Centred on *FinTech*, this cluster connects with artificial intelligence, financial literacy, financial advice, digitalization, and financial services. It illustrates how robo-advisory is situated within the broader FinTech ecosystem, where AI enables personalised, cost-effective, and accessible financial guidance. The emphasis on digitalization highlights the ongoing transition toward fully technology-driven financial service delivery.

Cluster 3 (Blue – Technological Foundations): Anchored in *artificial intelligence*, this cluster incorporates machine learning, deep learning, and blockchain. These keywords represent the technological backbone of robo-advisory systems, focusing on advanced computational methods, algorithmic efficiency, and secure data management that support reliability and scalability.

Additionally, niche terms such as *anthropomorphism* indicate emerging research directions exploring human-like features to enhance user experience and build trust. Collectively, the network demonstrates that robo-advisory research is inherently multidisciplinary, combining technological innovation, financial theory, and behavioural insights, while increasingly emphasising ethical AI and user-centric design.

Thematic Analysis

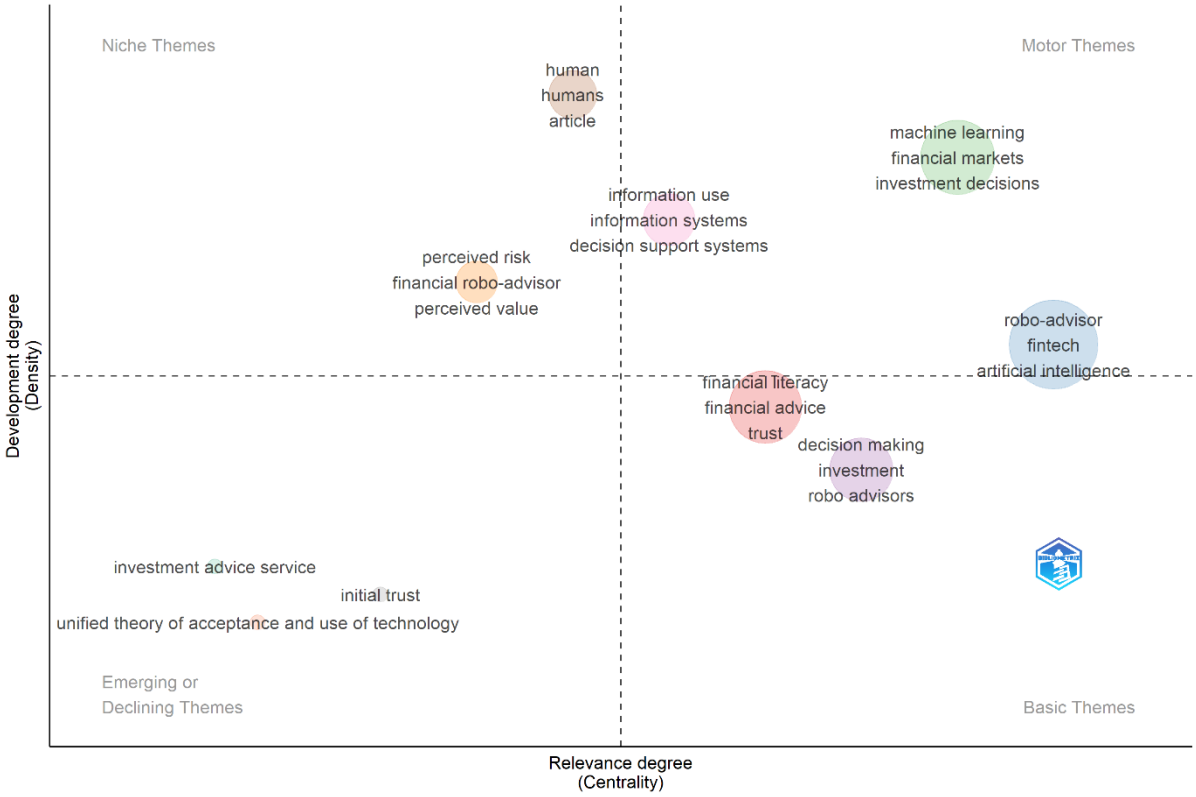

Figure 6: Thematic map

Source: Author's own creation using Scopus data (2014–2025)

Figure 6 presents the thematic map of robo-advisory research, categorizing themes based on their **centrality** (relevance) and **density** (development). The quadrants reveal the maturity and importance of various research themes within this domain.

Motor Themes (Upper Right Quadrant)

Themes in this quadrant are both highly relevant and well-developed, indicating core areas of research. Keywords such as *robo-advisor*, *FinTech*, *artificial intelligence*, *machine learning*, and *investment decisions* dominate this space. Their presence reflects the strong technological orientation of robo-advisory studies, emphasizing AI-driven investment strategies, algorithmic trading, and integration with broader FinTech ecosystems.

Basic Themes (Lower Right Quadrant)

These are essential but relatively underdeveloped themes. Terms like *financial literacy*, *financial advice*, *trust*, and *decision making* appear here, indicating their foundational role in shaping adoption behaviour and user acceptance. Although these themes are widely discussed, their low density suggests opportunities for deeper theoretical and empirical exploration.

Niche Themes (Upper Left Quadrant)

This quadrant includes specialized topics such as *perceived risk*, *perceived value*, and *decision support systems*. While well-developed, these themes have limited centrality, suggesting they cater to specific research contexts (e.g., behavioural finance or IT systems).

Emerging or Declining Themes (Lower Left Quadrant)

Keywords like *initial trust*, *investment advice service*, and *unified theory of acceptance and use of technology (UTAUT)* represent underdeveloped and less connected themes. Their position indicates early-stage research or diminishing scholarly attention, highlighting potential areas for future investigation.

Overall, the thematic map demonstrates that robo-advisory research is anchored in technological innovation while gradually expanding toward behavioural and adoption-related constructs. Future studies could focus on bridging the gap between these domains, integrating trust and risk perceptions with advanced AI-driven financial solutions

notable sources include *Financial Planning Review* and *Journal of Behavioural and Experimental Finance*, which focus on investor behaviour and decision-making aspects.

Overall, the figure highlights that research on robo-advisors is strongly concentrated around key themes such as *robo-advisor*, *fintech*, and *AI*, with substantial contributions from both technology-focused and finance-focused journals.

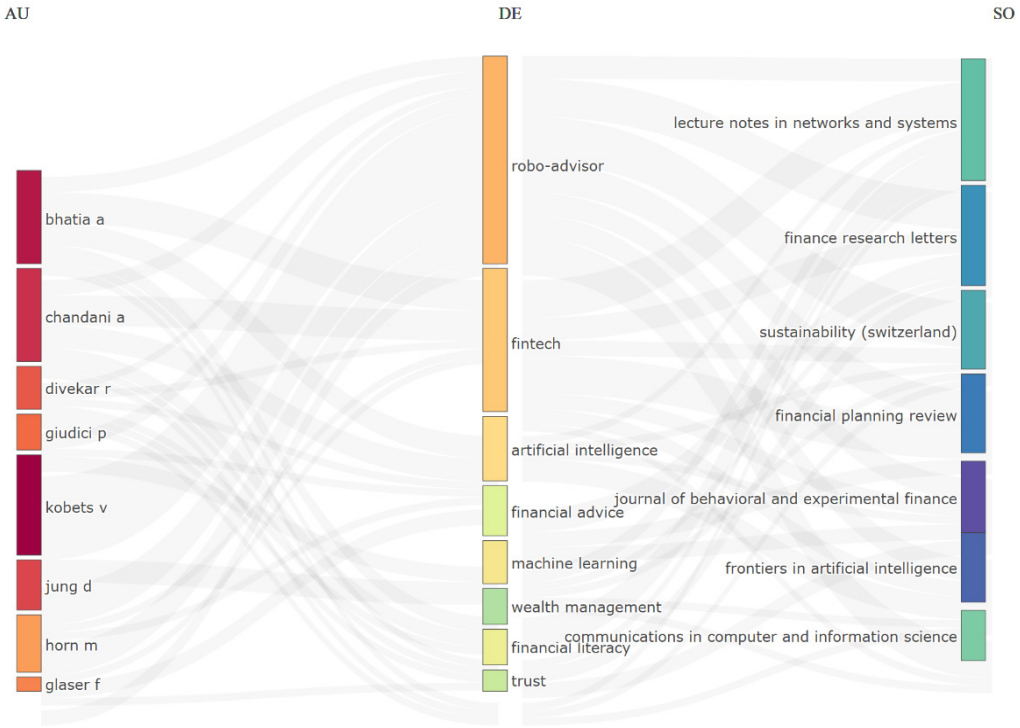

Figure 7: Link between authors, keywords & journals

Source: Author's own creation using Scopus data (2014–2025)

Figure 7 presents a three-field plot linking authors (AU), keywords (DE), and sources (SO) in robo-advisory research. The left column represents the most productive authors, the middle column shows the most frequent keywords, and the right column indicates the leading journals publishing this work.

From the visualization, Bhatia A, Chandani A, and Divekar R emerge as prominent contributors, frequently working on themes like *robo-advisor*, *fintech*, and *artificial intelligence*. Similarly, authors such as Jung D and Giudici P also show strong connections with topics like *financial advice*, *trust*, and *machine learning*.

On the journal side, Lecture Notes in Networks and Systems, Finance Research Letters, and Sustainability (Switzerland) appear as the most common publication outlets for this domain, reflecting an interdisciplinary blend of finance, technology, and sustainability research. Other

Discussion The bibliometric analysis provides detailed insights into the intellectual structure and evolution of robo-advisory research. The annual publication trends indicate a clear surge in scholarly output after 2018, coinciding with the rapid expansion of global FinTech ecosystems and the growing integration of artificial intelligence in financial services. This trend reflects a transition in robo-advisory services from experimental technology to an established component of mainstream financial systems, supported by advances in automation, data analytics, and machine learning.

The country-level findings show that India, the United States, and China are among the most active contributors in terms of publication output, with the United States also leading in citation impact. This suggests that while multiple countries are contributing significantly to the volume of research, the United States is influencing the theoretical and methodological direction of the field. Strong collaboration

patterns, particularly between Asian and European nations, further highlight the global relevance of robo-advisory research and the shared challenges and opportunities faced across markets. The prominence of journals such as the *Journal of Management Information Systems* and *Industrial Management and Data Systems* also reflects the interdisciplinary nature of the topic, bringing together perspectives from finance, technology, and behavioural science.

The keyword co-occurrence and thematic mapping reveal two dominant research streams: technology-oriented studies focusing on artificial intelligence, machine learning, and blockchain, and user-focused studies examining factors such as trust, financial literacy, and adoption behaviour. Well-established themes such as robo-advisors and FinTech suggest a strong technological base, whereas areas like trust and decision making are still relatively underexplored. Recent interest in topics such as algorithmic transparency, explainability, and personalized advisory services indicates a shift towards addressing behavioural and ethical concerns alongside technological advancements. Overall, the results suggest that while the technical capabilities of robo-advisory platforms are developing rapidly, their long-term adoption will depend equally on building trust, ensuring transparency, and aligning services with user needs.

Conclusion

This study presents a comprehensive bibliometric mapping of robo-advisory research based on 459 Scopus-indexed publications from 2014 to 2025. Using Biblioshiny and VOSviewer, it identifies the main thematic clusters, influential contributors, and leading countries that shape this area of study. The findings confirm a rapid increase in publications, with India, the United States, and China emerging as key contributors and strong international collaboration networks highlighting the global scope of the field.

The main contribution of the study lies in organising a fragmented body of literature into a structured overview, highlighting research trends and gaps that can inform future work. For industry practitioners, the results point to the growing role of AI-driven financial advisory systems and the importance of designing user-friendly, trustworthy, and accessible platforms. For policymakers, the findings underline the need for clear regulatory frameworks to ensure transparency, fairness, and accountability in algorithmic decision making. By examining both technological and behavioural perspectives, this study provides valuable insights for academics, industry professionals, and regulators seeking to shape the future of digital financial services.

Limitations and Future Research

Although this study provides a wide-ranging overview, certain limitations should be acknowledged. The analysis is based solely on Scopus-indexed and English-language publications, which may exclude relevant studies from other databases and non-English sources. In addition, citation-based measures tend to favour older publications, meaning that recent high-quality research may be undervalued in the results.

Future studies could address these limitations by including multiple databases and a broader range of languages, as well as by considering alternative measures of research impact, such as Altmetric scores or download statistics. There is also scope for further investigation into areas that are emerging but still underdeveloped. These include the role of algorithmic transparency and explainability in building user trust, the ethical and regulatory considerations surrounding AI in financial services, and the development of personalised advisory models that adapt to individual investor profiles. Greater attention to cultural differences, perceived risk, and behavioural factors could also enrich the understanding of adoption patterns across different markets. Such research would not only strengthen the theoretical foundations of the field but also contribute to the practical design and governance of robo-advisory services.

References

- Allen, F., Gu, X., & Jagtiani, J. (2021). A survey of fintech research and policy discussion. *Review of Corporate Finance*, *1*, 259–339.
- Banerjee, A., Kumar, R. P., & Mohnot, R. (2025). Embedding behavioral biases into robo-advisory platforms-case of UAE investors. *The Journal of Risk Finance*, *26*(1), 41–55.
- Belanche, D., Casaló, L. V., & Flavián, C. (2019). Artificial Intelligence in FinTech: Understanding robo-advisors adoption among customers. *Industrial Management & Data Systems*, *119*(7), 1411–1430.
- Brenner, L., & Meyll, T. (2020). Robo-advisors: A substitute for human financial advice? *Journal of Behavioral and Experimental Finance*, *25*, 100275.
- Flavián, C., Pérez-Rueda, A., Belanche, D., & Casaló, L. V. (2022). Intention to use analytical artificial intelligence (AI) in services–the effect of technology readiness and awareness. *Journal of Service Management*, *33*(2), 293–320.
- Gomber, P., Kauffman, R. J., Parker, C., & Weber, B. W. (2018). On the Fintech Revolution: Interpreting the Forces of Innovation, Disruption, and Transformation in Financial Services. *Journal of Management Information Systems*, *35*(1), 220–265. https://doi.org/10.1080/07421222.2018.1440766
- Hildebrand, C., & Bergner, A. (2021). Conversational robo advisors as surrogates of trust: Onboarding experience, firm perception, and consumer financial decision making. *Journal of the Academy of Marketing Science*, *49*(4), 659–676. https://doi.org/10.1007/s11747-020-00753-z
- Hu, X., Kang, S., Xue, S., & Zhu, S. (2025). Explainable robo-advisor: An online learning framework for new investors without trading records. *Neurocomputing*, *624*, 129463.

- Issami, M. A., & Tandamba, B. (2025). Competitiveness in the fintech industry: Is disruption sufficient? *Journal of Decision Systems*, *34*(1), 2537085. https://doi.org/10.1080/12460125.2025.2537085
- Jiang, W., Tang, Y., Xiao, R. J., & Yao, V. (2025). Surviving the FinTech disruption. *Journal of Financial Economics*, *171*, 104071.
- Judijanto, L. (2025). Fintech Disruption in Traditional Banking: A Bibliometric Review. *The Es Economics and Entrepreneurship*, *3*(03), 333–346.
- Jung, D., Dorner, V., Glaser, F., & Morana, S. (2018). Robo-Advisory: Digitalization and Automation of Financial Advisory. *Business & Information Systems Engineering*, *60*(1), 81–86. https://doi.org/10.1007/s12599-018-0521-9
- 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 & Finance*, *94*, 103411.
- Wagner, F. (2024). Determinants of conventional and digital investment advisory decisions: A systematic literature review. *Financial Innovation*, *10*(1), 18. https://doi.org/10.1186/s40854-023-00538-7
- Zhang, L., Pentina, I., & Fan, Y. (2021). Who do you choose? Comparing perceptions of human vs robo-advisor in the context of financial services. *Journal of Services Marketing*, *35*(5), 634–646.

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Annexure 17.2.6

Submission Date	Submission Id	Word Count	Character Count
03-May-2025	4226168 (DrillBit)	4244	31242

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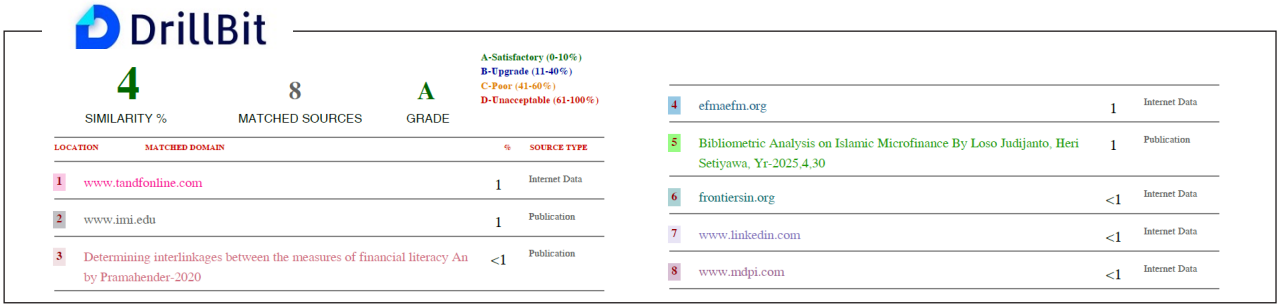

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4 SIMILARITY %

8 MATCHED SOURCES

A GRADE

A-Satisfactory (0-10%)
B-Upgrade (11-40%)
C-Poor (41-60%)
D-Unacceptable (61-100%)

	LOCATION	MATCHED DOMAIN	%	SOURCE TYPE
1	www.tandfonline.com		1	Internet Data
2	www.imi.edu		1	Publication
3	Determining interlinkages between the measures of financial literacy An by Pramahender-2020		<1	Publication
4	efmaefm.org		1	Internet Data
5	Bibliometric Analysis on Islamic Microfinance By Loso Judijanto, Heri Setiyawa, Yr-2025,4,30		1	Publication
6	frontiersin.org		<1	Internet Data
7	www.linkedin.com		<1	Internet Data
8	www.mdpi.com		<1	Internet Data

Reviewers Memorandum

Reviewer's Comment 1: The paper presents a systematic bibliometric analysis of robo-advisory services, offering valuable insights into publication trends, influential authors, and thematic clusters. The use of bibliometric tools enhances the rigor of the study and provides a clear intellectual mapping of the field. One area of improvement would be to add comparative insights between earlier and recent phases of research. Highlighting how themes have evolved over time (for example, from adoption barriers to trust, explainability, and financial literacy) would give the paper greater depth.

Reviewer's Comment 2: The manuscript is well-structured and makes effective use of performance analysis, thematic mapping, and co-occurrence networks. The visualizations are clear and add to the readability of the paper. However, in some cases, the discussion is more descriptive than interpretive. A deeper analysis of how different thematic clusters (such as AI in finance, investor adoption behaviour, and regulatory concerns) are interconnected would strengthen the contribution. Adding a comparative element with global literature could also enhance the paper's international relevance.

Reviewer's Comment 3: The study makes a strong contribution by consolidating fragmented literature on robo-advisors and pointing towards future research directions such as transparency, explainable AI, personalization, and sustainable investing. The limitations are acknowledged appropriately, which reflects academic integrity. To further improve, the authors could include a conceptual framework diagram linking intellectual clusters with future research avenues. Such a framework would serve as a useful synthesis for researchers and practitioners alike.

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Editorial Excerpt

The article has 04% plagiarism, which is within the accepted percentage as per the norms and standards of the journal for publication. As per the editorial board's observations and blind reviewers' remarks, the paper had some minor revisions, which were communicated promptly to the authors (Parveen and Subodh), and all necessary corrections were incorporated as and when directed. The comments related to this manuscript are closely aligned with the theme "Robo-Advisors as a FinTech Disruption: A Bibliometric Analysis" both subject-wise and research-wise. The article offers a comprehensive analysis of robo-advisory research as a FinTech disruption, integrating performance trends, thematic mapping, and collaboration networks. It effectively highlights key themes such as adoption behaviour, trust, financial literacy, and explainable AI, while also pointing towards future research opportunities in transparency, personalization, and regulatory frameworks. After thorough reviews and the editorial board's remarks, the manuscript has been categorized and approved for publication under the "Review of Literature" category.

Acknowledgement

The acknowledgement section is an essential part of all academic research papers. It provides appropriate recognition to all contributors for their hard work and effort taken while writing a paper. The data presented and analysed in this paper by the authors (Parveen and Subodh) were collected first handily and wherever it has been taken the proper acknowledgment and endorsement depicts. The author is highly indebted to others who facilitated accomplishing the research. Last but not least, endorse all reviewers and editors of GJEIS in publishing in the present issue.

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