

Influence of Artificial Intelligence Applications on Consumer Buying Behavior: A Systematic and Bibliometric Review of Emerging Trends and Insights

Mahima ¹, Dr Pooja Gupta ^{2*}

¹Research scholar, School of Commerce and Business Management, Geeta University, Panipat, India Email id: mahima.2206702012@geetauniversity.edu.in

^{2*}Associate Professor, School of Commerce and Business Management, Geeta University, Panipat, India Email id: pgpoojaguptamba85@gmail.com

Abstract

This paper's goal is to review available literature systematically to explore important AI-related construct and technologies and intentions behind use of AI applications. 650 publications from the Scopus database covering the years 1988–2025 are included in this exploratory study. A bibliometric study was performed for this publication using VOSviewer co-authorship, co-occurrence, citation, bibliographic coupling, and co-citation analysis features. Different clusters of co-occurrence exposed present and future researchers around the world to a variety of artificial intelligence-related topics. By identifying noteworthy trends in the literature, this research not only provides information about the most prominent authors and often referenced works, but it also showcases recent advancements in the field of artificial intelligence. This paper seeks to evaluate significant developments, advance scholarly discourse, pinpoint research gaps, and suggest future lines of inquiry and a research agenda.

Keywords- Bibliometric, Artificial Intelligence applications, Scopus, VOSviewer, Chatbot, Augmented reality, Consumer behavior

1. Introduction

Utilizing the intellect of machines or software to complete complicated tasks is the focus of artificial intelligence (Kalogirou, 2003). Artificial intelligence is the term used to describe the use of machines to simulate the human mind's decision-making and problem-solving abilities (Dhamija & Bag, 2020). By anticipating their behavior, AI helps to improve the customer journey. These days, artificial intelligence (AI) is a popular innovation technique that mimics human intellect by transforming data into insightful knowledge (Badea, 2014). Global digitization is accelerating, which guarantees integrated digital marketing's promising future. AI systemized the needs, preferences, and tastes of customers based on their interactions. Within a minute, AI enables the creation of ads based on data gathered from millions of customers (Nair & Gupta, 2021). Artificial intelligence makes it simple for marketers to comprehend the natural emotions and sentiments of potential clients. It gives digital marketers a variety of options that aid in attracting and keeping clients (Bock et al., 2020). Artificial intelligence has brought about a significant shift in the way that customer data is analyzed and processed.

A Chabot application of AI is used to respond to frequently requested client questions. By providing answers to commonly asked queries, it saves the time and effort of both marketer as well as consumer (Kaczorowska-Spychalska, 2019).

Instead of giving website visitors a single, generic experience, this AI solution tailors their experience by matching the material to the consumer's stage of the purchasing process (Nair & Gupta, 2021). One popular artificial intelligence technique that consumers use before deciding to purchase a product is augmented reality, sometimes known as virtual reality. Through virtual tasters, marketers can provide consumers augmented reality (Araújo et al., 2024).

Predictive analytics is the process of using analytics data to forecast target customers' purchasing patterns. After examining a large amount of data, predictive analytics identifies patterns (Ballestar et al., 2019). Artificial intelligence makes it feasible to determine which clients are impacted by discounts or special offers. AI aids in identifying consumers who stick with a business despite discounts or other special offers (Nair & Gupta, 2021). Intelligent personal assistants' (IPAs') conversational style may cause users to exhibit personification tendencies, which may result in increased customer loyalty and contentment (Lopatovska & Williams, 2018).

2. Literature review

2.1 AI and consumer behaviour

By incorporating anthropomorphic AI into customer interactions, recent developments in artificial intelligence (AI) have revolutionized marketing by changing decision-making, engagement, and trust. Anthropomorphism powered by AI in brand management, customer support, and digital marketing. AI transparency and consumer behavior, AI chatbots and customer experience, AI-generated influencers and consumer engagement, and the moral and cultural ramifications of AI anthropomorphism. AI addresses issues with transparency, authenticity, and customer perception while also influencing trust, emotional attachment, parasocial interactions, and purchasing behavior (Charles et al., 2025).

Recommender systems have aided e-commerce in the past few decades in offering consumers more individualized experiences, which has improved sales and client retention (Amatriain & Basilico, 2015).

Artificial intelligence (AI) systems are transparent and often provide concise justifications for their suggestions. This transparency builds trust by making it easier for customers to understand why particular items are recommended. According to study by Kizilcec (2016), transparent algorithmic decision-making procedures significantly boost consumer trust in AI systems. This transparency helps users understand how decisions are made, which increases their trust in the AI system (Gilpin et al., 2018).

The issue of financial fraud has gained more attention as financial transactions have become more digitalized and networked. Researchers have created a range of fraud prevention solutions to address this issue, combining big data and artificial intelligence technology to increase the effectiveness and precision of financial detection and prevention of fraud (Wang et al., 2024).

The AI system can safeguard safety against dishonest activity by identifying anomalous patterns and possible fraud in transactions (Brown, 2022). It is guaranteed that all information exchanged between the user and the chatbot will be encrypted.

AI-driven chatbots offer responses and unambiguous usage instructions. Customers prefer to save time and convenience, so when AI enhances the purchasing experience by speeding up research and automating and streamlining the checkout process, it fosters confidence (Chung et al., 2020). Users of AI-operated services that offer high levels of convenience and efficiency are more likely to live with and depend on technology. Virtual AI can enhance the entire shopping experience and boost customer happiness by giving quick and pertinent information, answering questions, and even anticipating future needs (Lemon and Verhof, 2016).

Without knowing the precise instructions, the user might be steered through chatbots' recommendations or signals, which makes tasks easier. An AI-integrated chatbot enhances customer service, eliminates the need for human intervention, and offers instant assistance and answers to questions in real time. Brands using virtual reality can assist in creating amazing and unforgettable marketing campaigns (Moriuchi et al., 2021).

An intelligent Virtual Personal Assistant (VPA) that prioritizes user-based information could be developed by utilizing emerging technologies (Imrie & Bednar, 2013).

AI-integrated search engines give consumers a wide range of possibilities for products and services. Customers can purchase more effectively when they have access to a variety of options. Customers can find the best deals by using the search engine to compare prices offered by various internet providers. Typically, this procedure includes tools for price comparison that are linked through search results or websites. Customers may easily review and assess products using search engines, learning what other people think about the products' performance and quality (Wang et al., 2012).

Convenience is the main priority nowadays; the less time and effort required the better. According to the authors, AI has raised consumer convenience to a new level. Customers that use bots as their preferred service delegate their decision-making to algorithms and provide minimal focus on brand prominence and conventional customer decision-making frameworks. This is currently particularly true for decisions with little involvement, but high involvement decisions are about to be delegated to AI. Management must so alter their perspective on how customers make decisions and how services are administered (Klaus & Zaichkowsky, 2022).

By making recommendations based on user preferences, AI can produce a more engaging and customized shopping experience. This customization may result in a more enjoyable conversion experience due to the interaction between the shopping platforms. Artificial intelligence-powered chatbots and virtual assistants offer the chance to engage in engaging activities that can amuse and aid with buying (Ylilehto et al., 2021).

2.2 Research objectives

Rq1: To review available literature systematically to explore important AI-related construct, technologies and intention behind use of AI applications?

Rq2: To determine which countries, institutions, sources, authors, and articles have contributed most to the field of artificial intelligence through bibliometric analysis?

Rq3: What directions might future studies in the discipline of artificial intelligence take?

2.3 Theoretical framework

All of the actions related to the acquisition of products and services are included in consumer behavior. Because they have access to so much information these days, customers are more conscious of their requirements, wants, and preferences. Every buyer weighs the possible benefits and drawbacks of a purchase before making it, and instead of squandering money, they think that every purchase should ideally provide them with some value in return. Customers now have this chance thanks to various digital marketing techniques. When someone senses that they have an unmet want, they begin to look for information. The consumer and the intended purchase determine the information search. Before purchasing a higher-value

good or service, a savvy customer always conducts a comprehensive analysis. The customer now evaluates the range of available options. The client wants to get the most out of the alternatives they have selected. Customers' knowledge obtained from a variety of sources is assessed based on both tangible and intangible advantages (Kotler et al., 2012). At this point, the customer decides to purchase a new good or service after weighing all of the possibilities and alternatives. The consumer's post-purchase behavior is contingent upon the fulfillment of their needs. When a customer's requirement is met, they might make another purchase and recommend it to others, or the other way around (Omar & Atteya, 2020).

Understanding how consumers accept and use new technology requires an understanding of consumer behavior theories. These ideas provide a framework for investigating the factors influencing technology's acceptance in diverse contexts. Theories of consumer behavior clarify the processes underlying consumers' interactions with goods and services as well as their purchase decisions. Many ideas and frameworks have been developed in order to comprehend and forecast the adoption and use of technology. These ideas are commonly employed in research to elucidate the procedures and rationales behind the adoption and utilization of new technology by individuals or organizations.

2.3.1 Model of technological acceptance

The model focuses on two theoretical concepts that are believed to be important in determining system use is its perceived benefit and simplicity of use. The perceived benefit is the degree to which a person believes that using a particular system would enhance his or her performance at work. Conversely, the perceived simplicity of use refers to the degree to which a person believes a particular technology would be simple to use. Although there has been a growing pessimism in the field over the ability to identify metrics that are strongly associated with user acceptability, the viewpoint offered here is far more optimistic (Davis, 1989).

2.3.2 Reasoned action theory and planned behavior

The focus of Reasoned Action and Planned Behavior theory is on theoretical frameworks that address individual motivational factors as predictors of the inclination to perform specific actions. The TRA and TPB are predicated on the notion that the best predictor of behavior is intention, which is derived from attitudes and social normative ideas about the action. The TPB is an expansion of the TRA that includes an additional construct called perceived control over behavior performance. The TRA and TPB provide a causal chain that links behavioral beliefs, normative beliefs, and control beliefs to behavioral intentions and behaviors through views, subjective standards, and perceived control. The TRA and TPB provide excellent frameworks for conceiving, assessing, and identifying the variables impacting behaviors. The TRA focuses on how cognitive factors like beliefs and values influence motivation. This method has been very helpful in explaining behaviors, particularly those that are controlled by will. When using behavioral theories, it's important to reconsider them and consider alternative theory-driven constructs that may increase their explanatory power (Fishbein & Ajzen, 1975). By incorporating perceived behavioral control, which addresses enabling or restricting factors that affect intention and behavior, TPB expands on TRA (Ajzen, 1991).

2.3.3 Decomposed Theory of Planned Behavior

To better understand the relationships between belief structures and the underlying reasons of intention, it is necessary to dissect attitudinal beliefs, according to Taylor and Todd (1995). This theory states that relative benefit, complexity, and compatibility are the three main characteristics of an innovation that influence acceptability. The decomposed TPB model has a higher explanatory power than the pure TPB and TRA models.

2.3.4 The Unified Theory of Technology Usage and Acceptance (UTAUT)

The theory holds that four main constructs—performance expectancy, effort expectancy, social influence, and enabling factors—have a direct impact on usage intention and behavior. It is believed that age, gender, prior experience, and intentional use act as mediators between the four primary components' effects on usage intention and behavior. Performance expectancy is the extent to which an individual believes that using technology would help him or her perform better at work. The degree of convenience associated with digital technology is known as effort expectation. Social influence is the degree to which an individual feels that important others, including peers, superiors, subordinates, etc., think that he or she should adopt technology. Facilitating circumstances or settings help users with e-commerce interoperability with different platforms and apps, as well as the hardware and software needed to operate on e-commerce (Venkatesh et al., 2003).

2.3.5 The Unified Theory of adoption and Use of Technology 2

UTAUT2 incorporates three constructs into UTAUT: habit, monetary value, and hedonic drive. It is believed that individual differences, such as identity, gender, experience level, and age, attenuate the effects of these

characteristics on behavioral intention and technology use. Hedonic motivation, or the pleasure or enjoyment that comes from utilizing a technology, has been shown to be a major determinant of technology adoption and utilization. The monetary cost that the user must bear is the price value of technology. The last two connected but distinct components added to UTAUT are experience and habit (Venkatesh et al., 2012).

3. Research methodology

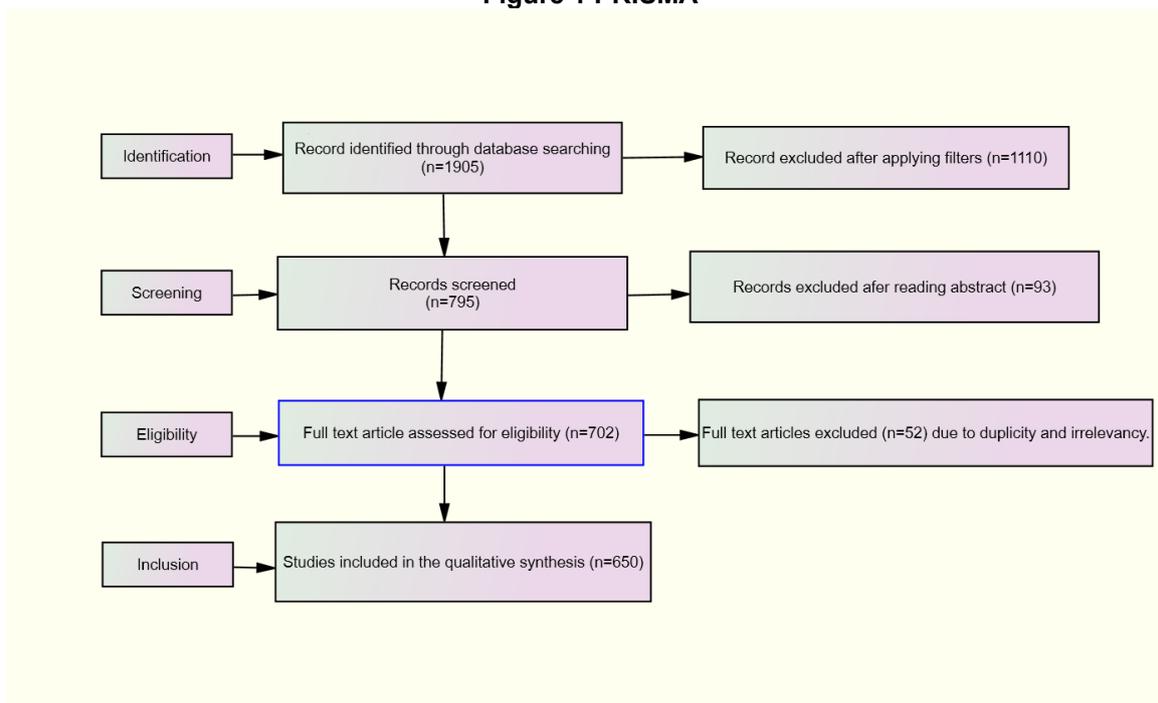
Systematic Literature review and bibliometric analysis using VOSviewer provides a thorough understanding of how Artificial Intelligence (AI) affects consumer purchasing behaviour. In parallel, bibliometric analysis was performed on 650 publications obtained from Scopus databases using VOSviewer. The study selects and methodically analyzes the papers using the PRISMA literature review technique, which is employed by many well-known authors (see figure 1). The following search query is used for bibliometric analysis:

TITLE-ABS-KEY (artificial AND intelligence AND consumer AND behavior).

Initial search with keywords resulted in 1905 articles published between 1988 and 2025. After applying filters regarding document type and language, the search process finally yielded 795 articles and final search query is as follows: TITLE-ABS-KEY (artificial AND intelligence AND consumer AND behavior) AND (LIMIT-TO (SUBJAREA , "BUSI") OR LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "PSYC") OR LIMIT-TO (SUBJAREA , "ECON")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "ch") OR LIMIT-TO (DOCTYPE , "cp")) AND (LIMIT-TO (LANGUAGE , "English"))

Duplicate and unnecessary entries were eliminated in the second step. The articles were also screened based abstract. Consequently, 650 publications were selected as the final sample for bibliometric analysis. The CSV format was used to record the search results. The stored result contains all relevant information, such as the title, abstract, and names of the authors, affiliations, abstracts, and keywords.

Figure 1 PRISMA



4. Result & Findings

The SLR synthesized key themes such as consumer trust, personalization, convenience, and AI-driven engagement, demonstrating alignment with behavioral models like the Technology Acceptance Model (TAM) and Theory of Planned Behaviour (TPB). It revealed that trust and transparency are fundamental to consumer adoption of AI, while tools like recommendation systems, chatbots, and virtual assistants shape behaviour across the purchase journey (see table1).

4.1 Systematic literature review Finding

Table 1 Prominent AI applications

AI application	Influence on consumer behavior	Reference study
Chabot	It saves time and effort for both marketers and consumers by offering answers to frequently asked questions and influence consumer behavior positively.	(Kaczorowska-Spychalska, 2019).
Web personalization	By matching the content to the consumer's stage of the purchasing process, this AI technology customizes the experience of website visitors rather than providing them with a single, generic experience.	(Nair & Gupta, 2021).
Augmented reality	Augmented reality is a well-liked artificial intelligence method that buyers consider before making a purchase.	(Araújo et al., 2022).
AI powered ads	AI powered ads attracts previously lost and potential clients to the website and influence impulse buying (Nair & Gupta, 2021).	(Nair & Gupta, 2021).
Voice assistants	Facilitate convenience search and purchase	(Lopatovska & Williams, 2018)

Table 2 AI related constructs influencing customer behavior

Constructs	AI impact	Key references
Trust	By providing them with as many pertinent insights as possible regarding the issue at hand, AI also assists clients in making wise judgments. Reliance on technology is increased when analytics are used instead of an intuitive understanding of it.	(Charles et al., 2025).
Personalization	By providing recommendations that are tailored to the user's tastes, previous activities, and browsing habits, artificial intelligence (AI) improves the shopping experience.	(Amatriain & Basilico, 2015)
Transparency	Transparent algorithmic decision-making processes greatly increase user confidence in AI systems.	(Kizilcec ,2016)
Security and Fraud Prevention	When consumers purchase on digital platforms, they feel more confident that AI can recognize and stop scams instantly.	(Wang et al., 2024), (Brown, 2022).
Efficiency and Convenience	Transparency boosts consumers' confidence in the AI system by enabling them to comprehend how decisions are made.	(Lemon and Verhof, 2016), (Chung et al., 2020)
Interaction	A chatbot with AI built in improves customer service, doing away with the need for human intervention, and provides immediate help and real-time replies to queries.	(Moriuchi et al., 2021), (Imrie & Bednar (2013)
Access to a wide range of data	AI-enabled search engines provide customers a vast array of options for goods and services.	(Wang et al., 2012)
Time saving	Ease is the main priority nowadays; the less time and effort required, the greater the advantage.	(Claus and Zaichkowsky, 2020).
Entertaining	AI can create a more personalized and interesting shopping experience by generating suggestions based on customer choices.	(Ylilehto et al., 2021).

Table 3 Exploring the intentions behind the use of AI applications: Theories of consumer behavior

Model	Key constructs	Reference studies
The technology acceptance model	Perceived utility, attitude toward utilizing, and simplicity of usage	(Davis, 1989).
The theory of reasoned action	intention to behave, subjective standards, and perspective toward behavior	(Fishbein & Ajzen ,1975)
Theory of planned behavior	Perceived behavioral control, attitude, and subjective standards.	(Ajzen, 1991).
Decomposed Theory of Planned Behavior	Belief-based frameworks for viewpoint, subjective standard, as well as perceived control over behavior.	(Taylor & Todd, 1995)
UTAUT	Expectations for performance (PE), expectations for effort (EE), societal impact (SI), and facilitative conditions (FC)	(Venkatesh et al., 2012).

AI and its economic and social impact on Consumer Decision-Making and purchase intention	retailing, service quality, virtual reality Artificial intelligence technology, big data, commerce, consumer behavior, decision making, economic and social effect machine learning, purchase intention, purchasing, social media, sales	This theme explores that how AI applications with the help of big data analytics influence consumer behavior economically and socially	(Tewari, 2025) (Ahmad et al., 2025) (Li, 2022) (Gutti et al., 2023) (Guan et al., 2024).
Technology Adoption and Automation in Post-COVID Hospitality and Tourism	Automation, covid-19, hospitality industry, innovation, robotics, service robots, sustainability, technology, technology acceptance, technology adoption, tourism	This cluster investigate technology adoption in hospitality and tourism industry	(Vij et al., 2024) (Du et al., 2024) (Wu & Nimmolrat 2024) (Ku et al., 2025) (Lancu & lancu, 2023)
Chatbot Interaction and Trust Metrics to shape Consumer Behavior	Chatbots, consumption behavior, e-commerce, marketing, numerical model, perception, theoretical study, trust	This cluster explain that how trust ,perception and marketing influence consumer behavior	(Nizette et al., 2025) (Pelau et al., 2024) (Li et al., 2024) (Pantano & Pizzi, 2020) (Yen & Chiang, 2021)
Consumer Perceptions and Attitude towards Generative AI	Adult, algorithm, article, consumer, consumer attitude, generative AI, human ,perceived value,	This topic examines how adult consumers engage with generative AI structures to develop attitudes, perceive values, and make decisions.	(Mai & Nguyen, 2025) (Cheng et al., 2025) (Fares et al., 2024) (Vatantzi et al., 2023) (Cillo, 2024) (Johnson et al., 2023)

4.2.3 Citation analysis

Citation analysis based on documents:

The number of citation linkages for each of the 650 papers will be ascertained by citation analysis. Of the 650 publications in total, 126 meet the minimum citation count criteria. For each of the 126 documents, the number of citation linkages is established (figure 6). The analysis reveals that 41 documents are connected. With 1163 citations, Dwivedi (2021) is the most significant document in the field. Sima (2020) and Sohn (2020) are next in line (see table 6).

Figure 6 Citation analysis based on documents

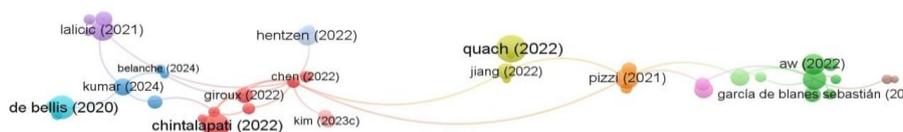


Table 6 Top cited documents

Reference study	Citation
dwivedi (2021)	1163
sima (2020)	436
sohn (2020)	377
vimalkumar (2021)	279
quach (2022)	237

prentice (2020)	233
chintalapati (2022)	198
song (2022)	194
joy (2022)	180
de bellis (2020)	171
yen (2021)	167
Seo (2021)	158
Pantano (2020)	154

Citation analysis based on sources

The overall strength of citation links for each of the 358 sources was determined using VOSviewer. Out of the 358 sources, 21 were determined to match the minimum document criteria, and 13 of the 21 sources were found to be related (see figure 7). With 49 articles in the relevant field, the Journal of Retailing and Consumer Services leads the field in contributions, followed by Social Change and Technological Forecasting (see table 7).

Figure 7

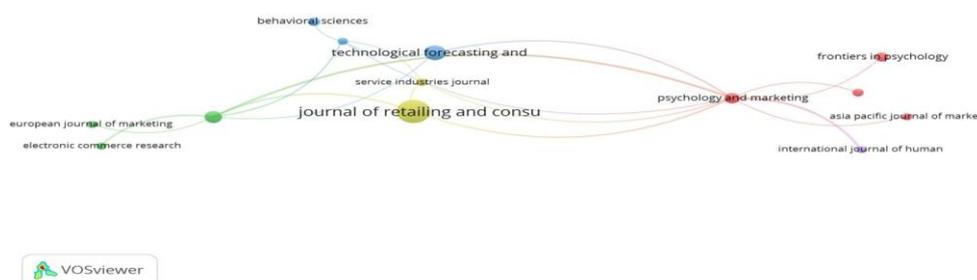


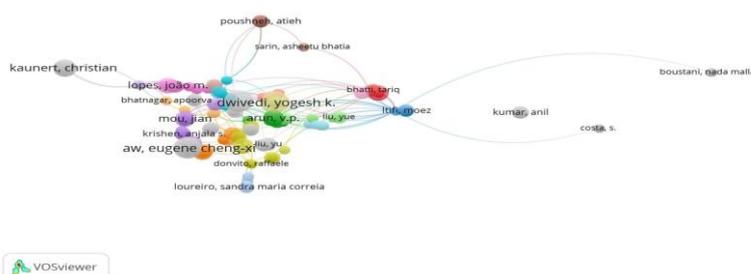
Table 7 Top cited sources

Sources	Documents	Citation	Total link strength
Journal of retailing and consumer services	49	1579	4
Technological forecasting and social change	20	664	3
Sustainability(Switzerland)	17	1030	0
Journal of business research	13	517	8
Psychology and marketing	11	434	9

Citation analysis based on authors

Using a minimum threshold of two documents, VOSviewer calculated the total potency of citation links for each of the 1000 writers who meet the threshold of one document and found that 563 authors are found to be connected. The authors who have contributed most significantly to the field of artificial intelligence are also revealed through citation analysis based on authors (see figure 8).

Figure 8 Citation analysis based on authors



Citation analysis based on organizations

The organizations that made the biggest contributions in the subject were identified by an analysis of citations based on organizations. 438 organizations were discovered to be connected when VOSviewer calculated the overall strength of citation relationships for each of the 1478 organizations (see figure 9). The most influential institution was also identified using citation analysis based on organizations (see Table 9).

Figure 9 Citation analysis based on organization

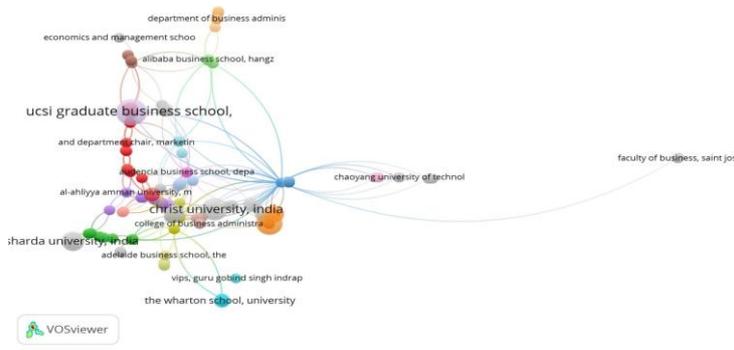


Table 9 Prominent contributing organization

Organization	Country	Citation
University of Nevada, United states	United states	1163
Paris school of business, France	France	1163
Ryerson university ,Canada	Canada	1163
University of Sheffield, United kingdom	United kingdom	1163
School of business and economics, Finland	Finland	1163
Manchester metropolitan university, United kingdom	United kingdom	1163
UCSI graduate business school	Malaysia	323
Colorado state university	United states	237
Griffith business school	Australia	237
University of Washington	United kingdom	237

Citation analysis based on country

Thirteen of the 82 countries in total reach the 20 citation mark. VOSviewer is used to determine the overall link strength of citation links with other nations for each of the 13 countries. According to the number of publications, the United States, China, and India are the top three nations (see figure & table 10).

Figure 10 Citation analysis based on country

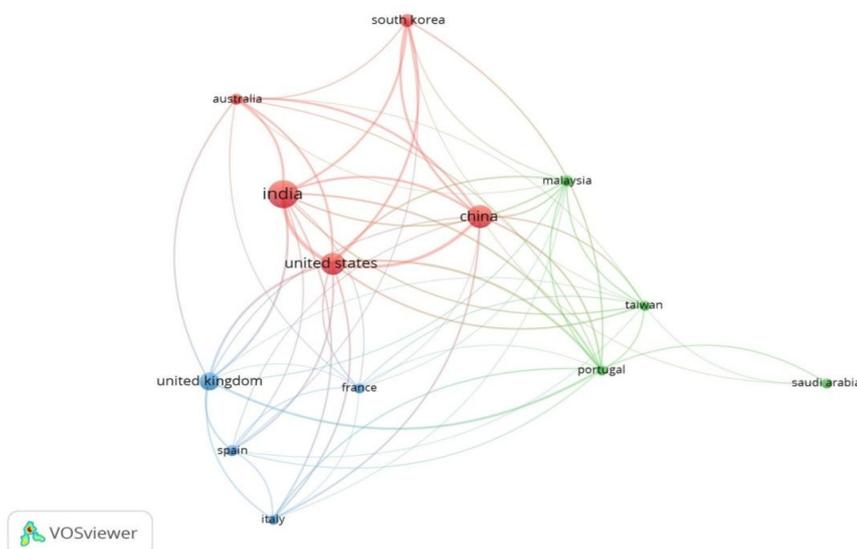


Table 10 Prominent contributing counties

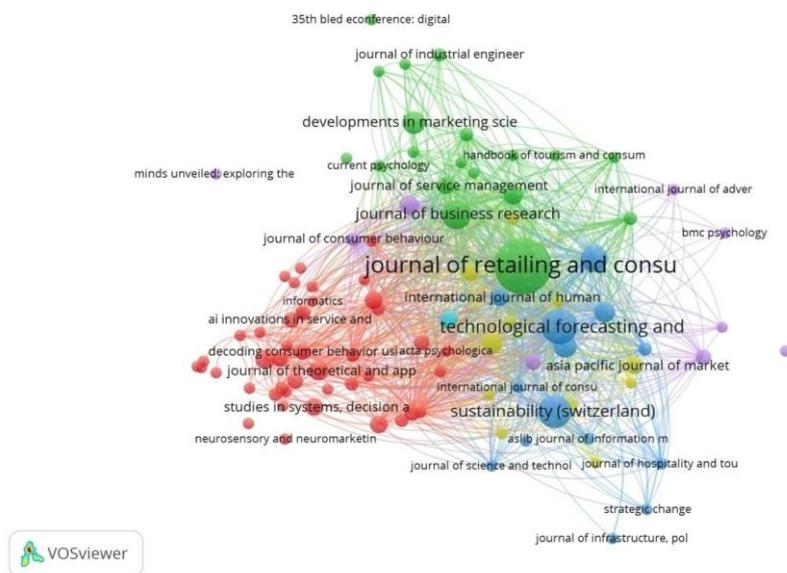
Country	Document	Citation	Total link strength
United states	94	3022	117
India	156	2771	96
China	110	1888	81
Portugal	20	137	62
United Kingdom	66	2754	53
Australia	25	1955	43
South Korea	37	1308	42
Malaysia	26	561	33
Taiwan	22	725	31
Italy	20	513	30
Spain	24	450	26
France	23	1609	17
Saudi Arabia	21	250	5

4.2.4 Bibliographic coupling

Bibliographic coupling of journal sources

VOSviewer, a bibliometric analysis tool that is extensively used by the international research community, is used to evaluate the effect of a particular publication (Kumar et al., 2020). VOSviewer was used to calculate the overall strength of bibliographic coupling linkages with other sources for each of the 358 sources. Ninety-nine sources met the criterion of having at least two documents. 97 of the 99 sources were discovered to be related (see figure 11).

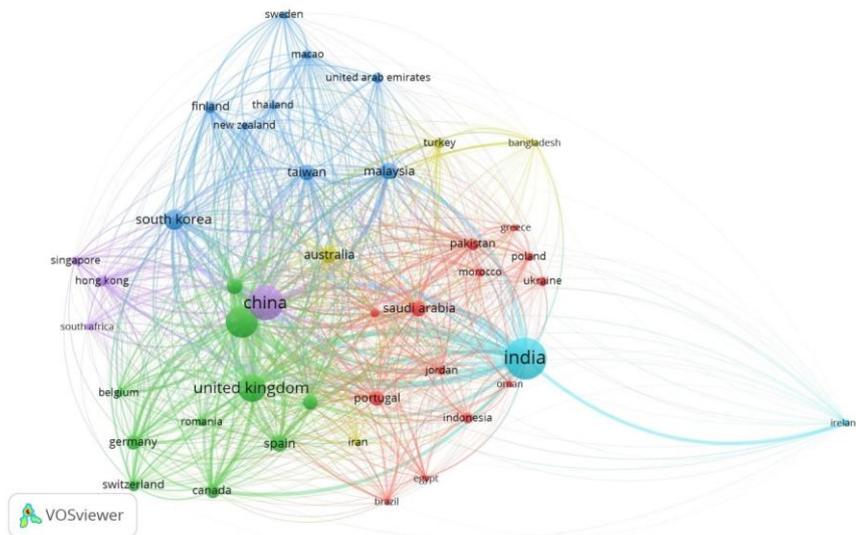
Figure 11 Bibliographic coupling of journal sources



Bibliographic coupling of countries

Only forty-two of the eighty-two nations meet the minimum document requirement. For each of the 42 countries, the overall strength of bibliographic coupling relationships with other countries was determined using VOSviewer. China leads the world in terms of contribution, followed by the US and India (see figure 12). The circle's size represents the contribution level of the particular nation. The spacing between the rings symbolizes how intertwined the nations are. The degree of connection between two points is directly proportional to their proximity, while the degree of connection between two points is inversely proportional to their distance. The top 10 nations that have contributed the most are shown in Table 7.

Figure 12 Bibliographic coupling of countries

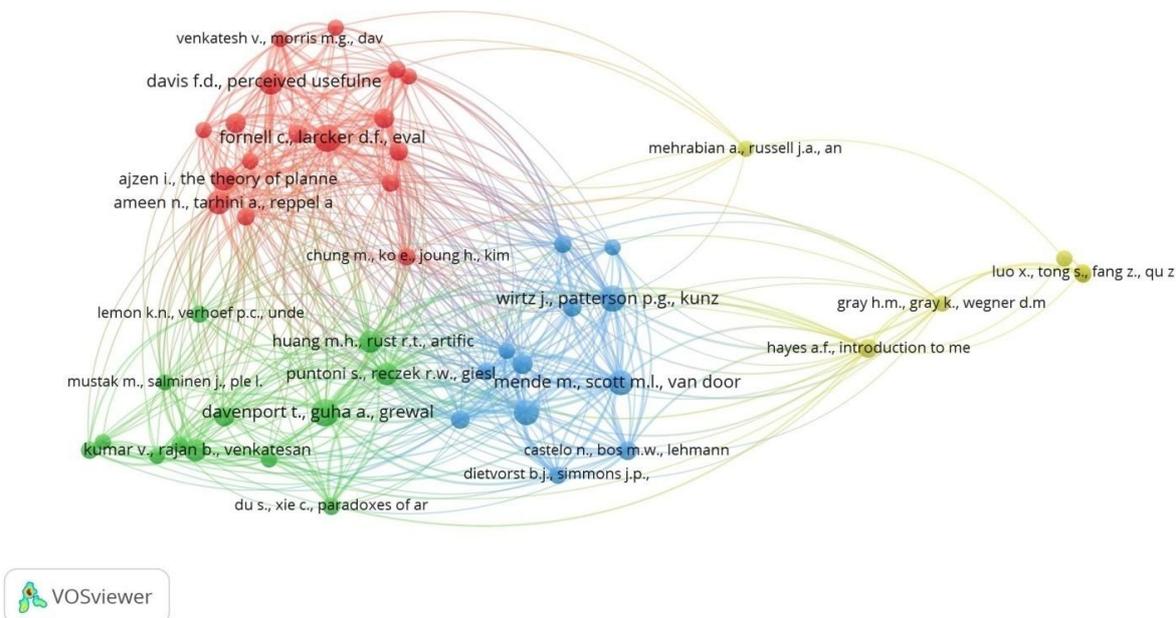


4.2.5 Co-citation analysis

Co-citation analysis (cited references)

Only 48 of the 38817 cited references meet the 10 citation minimum requirement. For each of the 48 references, VOSviewer calculated the overall strength of co-citation links with other cited references (see figure 13).

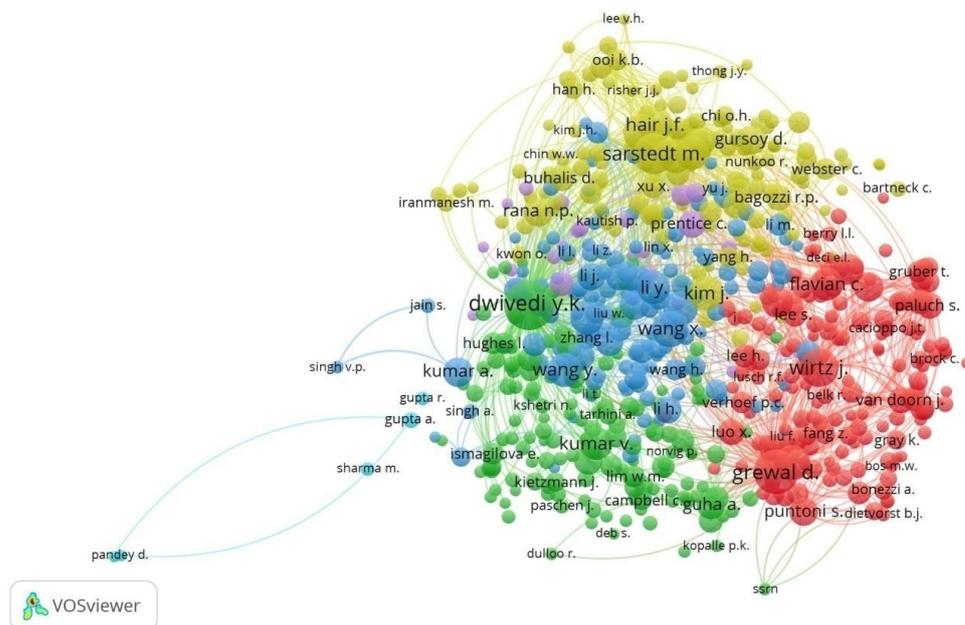
Figure 13 Co-citation analysis (cited references):



Co-citation analysis (cited authors)

Among the 55165 authors, only 622 have achieved the minimum criterion of 20 citations. VOSviewer estimated the total strength of the co-citation relationship for each of the 622 authors, as shown in Figure 14.

Figure 14 Co-citation analysis (cited authors)



5. Discussion of findings

According to a comprehensive review of the literature, the most common uses of AI are voice assistants, chatbots, online personalization, augmented reality, and AI-powered ads. Key AI-related themes include trust, personalization, transparency, security and fraud detection, efficiency and convenience, interaction, access to a range of data, time savings, and entertainment, according to a thorough review of the literature. The Theory of Technology Acceptance Model, Reasoned Action, Planned Behavior, and UTAUT are the primary consumer behavior theories that look at the reasons for the use of AI apps.

With 1163 citations, Dwivedi (2021) is the most influential author, followed by Sima (2020) and Sohn (2020), with 436 and 377 citations, respectively, according to a co-authorship analysis based on authors (see table 6). With 49 articles and 1579 citations, the publication of Retailing and Consumer Services is the most influential publication. It is followed by Technological Forecasting and Social Change, which has 20 articles and 664 citations (see table 7). With 94 documents and 3022 citations, the United States is the leading contributor, followed by China and India (see table 10). The leading contributing institution is the University of Nevada in the United States, which is followed by the Paris School of Business in France (see table 9). Co-occurrence analysis based on keywords also identified prominent clusters (see table 5).

6. Limitations of the study and Future research directions

By covering the most renowned authors, institutions, articles, journals, and nations, the current study sought to improve the caliber of AI research. The current study highlights a number of artificial intelligence research components that will help investigators and researchers explore new facets of this discipline. The current state and developments in the field of artificial intelligence were also revealed by this investigation. The majority of studies in the relevant field concentrate on the retail or hotel and tourist sectors, according to bibliometric and systematic literature reviews. Many other significant industries, such the automotive and educational sectors, continue to receive little attention from researchers worldwide. This study's reliance on information from the Scopus database is one of its main limitations. Although Scopus is an extensive bibliographic database, not all journals that generate high-caliber papers are included in its index. There is still a great deal of information and research to be done in the field of artificial intelligence because it is still in its infancy. The study offers fresh ideas and methods that will help scholars everywhere look at the relationship between artificial intelligence (AI) and consumer buying patterns.

References

1. Ahmad, S., Karim, R., Sultana, N., & Lima, R. P. (2025). InsurTech: Digital Transformation of the Insurance Industry. In *Financial Landscape Transformation: Technological Disruptions* (pp. 287-299). Emerald Publishing Limited.
2. Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
3. Amatriain, X., & Basilico, J. (2015). Recommender systems in industry: A netflix case study. In *Recommender systems handbook* (pp. 385-419). Boston, MA: Springer US.
4. Amin, A. (2025). Artificial intelligence in social media: a catalyst for impulse buying behavior?. *Young Consumers*.
5. Araújo, L., & Soares, M. M. (2024). Exploring Student Attention in the Metaverse: A Systematic Literature Review from the Perspective of Design and Ergonomics. In *International Conference on Human-Computer Interaction* (pp. 3-20). Springer, Cham.
6. Badea, L. M. (2014). Predicting consumer behavior with artificial neural networks. *Procedia Economics and Finance*, 15, 238-246.
7. Bagozzi, R. P. (2007). The legacy of the technology acceptance model and a proposal for a paradigm shift. *Journal of the association for information systems*, 8(4), 3.
8. Bailey, C. (2024). Improving brand outcomes through consumer co-creation: An agile formula for success. *Journal of Brand Strategy*, 13(4), 314-324.
9. Ballestar, M. T., Doncel, L. M., Sainz, J., & Ortigosa-Blanch, A. (2019). A novel machine learning approach for evaluation of public policies: An application in relation to the performance of university researchers. *Technological Forecasting and Social Change*, 149, 119756.
10. Bock, D. E., Wolter, J. S., & Ferrell, O. C. (2020). Artificial intelligence: disrupting what we know about services. *Journal of Services Marketing*, 34(3), 317-334.
11. BROWN, J. (2022). Explainable AI for Transparent Fraud Detection in Financial Systems.
12. Charles, V., Rana, N. P., & Jain, V. (2025). Marketing with anthropomorphised AI: insights from consumers. *Journal of Consumer Marketing*.
13. Cheng, X., Zeng, A., Yang, B., Liu, Y., & Zhang, X. (2025). Online reviews generated by generative artificial intelligence versus human: A study of perceived differences and user adoption behavior. *Electronic Commerce Research and Applications*, 71, 101497.
14. Chung, M., Ko, E., Joung, H., & Kim, S. J. (2020). Chatbot e-service and customer satisfaction regarding luxury brands. *Journal of business research*, 117, 587-595.
15. Cillo, P., & Rubera, G. (2024). Generative AI in innovation and marketing processes: A roadmap of research opportunities. *Journal of the Academy of Marketing Science*, 1-18.
16. Davis, F. D. (1989). Technology acceptance model: TAM. *AI-Suqri, MN, Al-Aufi, AS: Information Seeking Behavior and Technology Adoption*, 205(219), 5.
17. Dhamija, P., & Bag, S. (2020). Role of artificial intelligence in operations environment: a review and bibliometric analysis. *The TQM Journal*, 32(4), 869-896.
18. Du, H., Li, J., So, K. K. F., & King, C. (2024). Artificial intelligence in hospitality services: examining consumers' receptivity to unmanned smart hotels. *Journal of Hospitality and Tourism Insights*, 8(11), 55-78.
19. Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., ... & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International journal of information management*, 59, 102168.
20. Fares, O. H., Zhu, Q., Lee, S. H. M., & Aversa, J. (2024). Consumers' Drivers of Generative Pre-Trained Transformer (GPT) Conversational Bot Adoption. In *Revolutionizing the Service Industry With OpenAI Models* (pp. 114-145). IGI Global.
21. Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research.
22. Gilpin, L. H., Bau, D., Yuan, B. Z., Bajwa, A., Specter, M., & Kagal, L. (2018, October). Explaining explanations: An overview of interpretability of machine learning. In *2018 IEEE 5th International Conference on data science and advanced analytics (DSAA)* (pp. 80-89). IEEE.
23. Guan, B., Li, X., Luo, Z., & Liu, P. (2024). Can (A) I arouse you? The impact of AI services on consumer pro-environmental behavior. *Journal of Hospitality & Tourism Research*, 10963480241256602.
24. Gutti, D., Yadav, G. V., & Kaja, H. (2023). Influence of artificial intelligence in consumer decision-making process. *The Business of the Metaverse: How to Maintain the Human Element Within This New Business Reality*, 141-155.
25. Iancu, I., & Iancu, B. (2023). Interacting with chatbots later in life: A technology acceptance perspective in COVID-19 pandemic situation. *Frontiers in psychology*, 13, 1111003.

26. Jakhodia, Y., Gupta, T., & Singh, T. (2025). Impact of Artificial Intelligence on Consumer Online Purchase Intention. In *Multi-Industry Digitalization and Technological Governance in the AI Era* (pp. 297-316). IGI Global Scientific Publishing.
27. Johnson, J. P., Rhodes, A., & Wildenbeest, M. (2023). Platform design when sellers use pricing algorithms. *Econometrica*, 91(5), 1841-1879.
28. Kaczorowska-Spychalska, D. (2019). Chatbots in marketing. *Management*, 23(1).
29. Kalogirou, S. A. (2003). Artificial intelligence for the modeling and control of combustion processes: a review. *Progress in energy and combustion science*, 29(6), 515-566.
30. Kizilcec, R. F. (2016, May). How much information? Effects of transparency on trust in an algorithmic interface. In *Proceedings of the 2016 CHI conference on human factors in computing systems* (pp. 2390-2395).
31. Klaus, P., & Zaichkowsky, J. L. (2022). The convenience of shopping via voice AI: Introducing AIDM. *Journal of Retailing and Consumer Services*, 65, 102490.
32. Kotler, P. (2012). *Kotler on marketing*. Simon and Schuster.
33. Ku, E. C., Wu, S. H., & Lai, T. C. (2025). Elegant with leisurely: luxury tourism consumption and brand love. *Journal of Hospitality & Tourism Research*, 49(4), 750-763.
34. Lemon, K. N., & Verhoef, P. C. (2016). Understanding customer experience throughout the customer journey. *Journal of marketing*, 80(6), 69-96.
35. Li, B., Yao, R., & Nan, Y. (2024). How does anthropomorphism promote consumer responses to social chatbots: mind perception perspective. *Internet Research*.
36. Li, Y. (2022). Investigating the differences between females perceive same-gender and heterogender sex robots regarding adoption and intentions. *Frontiers in psychology*, 13, 922108.
37. Lopatovska, I., & Williams, H. (2018, March). Personification of the Amazon Alexa: BFF or a mindless companion. In *Proceedings of the 2018 Conference on Human Information Interaction & Retrieval* (pp. 265-268).
38. Mai, X. T., & Nguyen, T. (2025). Trust in generative artificial intelligence: A systematic literature review. *Trust in Generative Artificial Intelligence*, 12-24.
39. Misra, P. (2024). Purchase intention toward E-pharmacy: the consumption value perspective. *International Journal of Pharmaceutical and Healthcare Marketing*.
40. Moriuchi, E., Landers, V. M., Colton, D., & Hair, N. (2021). Engagement with chatbots versus augmented reality interactive technology in e-commerce. *Journal of Strategic Marketing*, 29(5), 375-389.
41. Nair, K., & Gupta, R. (2021). Application of AI technology in modern digital marketing environment. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3), 318-328.
42. Nair, K., & Gupta, R. (2021). Application of AI technology in modern digital marketing environment. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3), 318-328.
43. Nair, K., & Gupta, R. (2021). Application of AI technology in modern digital marketing environment. *World Journal of Entrepreneurship, Management and Sustainable Development*, 17(3), 318-328.
44. Nizette, F., Hammedi, W., van Riel, A. C., & Steils, N. (2025). Why should I trust you? Influence of explanation design on consumer behavior in AI-based services. *Journal of Service Management*, 36(1), 50-74.
45. Omar, A. M., & Atteya, N. (2021). The impact of digital marketing on consumer buying decision process in the Egyptian market. *International Journal of Business and Management*, 15(7), 120-120.
46. Pantano, E., & Pizzi, G. (2020). Forecasting artificial intelligence on online customer assistance: Evidence from chatbot patents analysis. *Journal of Retailing and Consumer Services*, 55, 102096.
47. Pelau, C., Dabija, D. C., & Stanescu, M. (2024). Can I trust my AI friend? The role of emotions, feelings of friendship and trust for consumers' information-sharing behavior toward AI. *Oeconomia Copernicana*, 15(2), 407-433.
48. Pramod, D., Patil, K. P., & Bharathi S, V. (2025). Is it really unreal? A two-theory approach on the impact of deepfakes technology on the protection motivation of consumers. *Cogent Business & Management*, 12(1), 2461239.
49. Taylor, S., & Todd, P. (1995). Decomposition and crossover effects in the theory of planned behavior: A study of consumer adoption intentions. *International journal of research in marketing*, 12(2), 137-155.
50. Tewari, S. K. (2025). Data-Driven Marketing in Emerging Markets: Navigating Challenges for Sustainable Development. In *Digital Transformation for Business Sustainability and Growth in Emerging Markets* (pp. 171-196). Emerald Publishing Limited.
51. Vatantzi, K., Vlachvei, A., & Antoniadis, I. (2023, June). Consumer Attitudes Toward Artificial Intelligence in Fashion. In *International Conference on Applied Economics* (pp. 1127-1142). Cham: Springer Nature Switzerland.

52. Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science*, 46(2), 186-204.
53. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS quarterly*, 425-478.
54. Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, 157-178.
55. Vij, M., Vij, A., Kumar, P., & Shameem, B. (2024, February). Impact of AI-Driven Customer Insights on Brand Engagement and Loyalty in Tourism Marketing. In *2024 2nd International Conference on Cyber Resilience (ICCR)* (pp. 1-6). IEEE.
56. Wang, L., Wang, J., Wang, M., Li, Y., Liang, Y., & Xu, D. (2012). Using Internet search engines to obtain medical information: a comparative study. *Journal of medical Internet research*, 14(3), e74.
57. Wang, Z., Shen, Q., Bi, S., & Fu, C. (2024). AI Empowers Data Mining Models for Financial Fraud Detection and Prevention Systems. *Procedia Computer Science*, 243, 891-899.
58. Wu, Q., & Nimmolrat, A. (2024, June). Employees' Perceptions on Service Robot Acceptance in Chengdu Hotel Industry. In *2024 5th Technology Innovation Management and Engineering Science International Conference (TIMES-iCON)* (pp. 1-5). IEEE.
59. Yen, C., & Chiang, M. C. (2021). Trust me, if you can: a study on the factors that influence consumers' purchase intention triggered by chatbots based on brain image evidence and self-reported assessments. *Behaviour & Information Technology*, 40(11), 1177-1194.