Journal of Research Administration
Society of Research Administrators International

AI ON CONSUMER BEHAVIOUR AND MARKETING STRATEGIES: AUTHOR'S PERSPECTIVES WITH BIBLIOMETRIC STUDY

Dr. Silika Dash

Assistant Professor, BIITM, Bhubaneswar

Prof. Hitesh Kumar Kar

Assistant Professor, RCM, Bhubaneswar

ABSTRACT

In marketing, artificial intelligence (AI) has become a disruptive force that has a big impact on customer Behaviour and marketing tactics. Applications of AI cover a range of main marketing categories, such as product, place management, price, strategy and planning, and promotion[1]. Marketers are using AI more and more to match products and services to customer wants, better understand consumer needs, and improve persuasive efforts—essential marketing tasks that AI can significantly improve[2]. To deliver highly accurate insights and enable firms to develop effective plans for development and future success, artificial intelligence (AI) marketing integrates AI technology with customer and brand experience data[3]. Marketing could undergo a revolution if AI and cognitive biases are combined, opening up new avenues for effective and focused advertising campaigns[3]. It is anticipated that AI will have a growing impact on marketing, providing advantages including enhanced analytics, more accurate trenddetection, and more effective campaign strategies[4]. AI-enhanced customer reaction analysishas become a key component of marketing strategies, allowing businesses to present information that elicits favourable interactions and corresponds with consumer preferences[5]. With advantages like predictive modelling to predict future consumer trends, machine learning algorithms for customized marketing strategies, and real-time analysis to react quickly to shifting consumer preferences and market dynamics, artificial intelligence (AI) is expected to have a significant impact on marketing in the years to come[5].

The paper predicts and analyses the viewpoints of authors related to the study of AI in the latest market spheres. Apart from that, the paper also studies the bibliometric analysis related to artificial intelligence relating to two concentrated areas of the marketing arena. Mostly due to the time constraint factor, only two latest marketing ideas could have been drawn to make thestudy which are consumer behaviour and marketing strategies, being the prominent topic of the timeframe. The research paper will focus its attention on the peak rise of AI paper in specific areas with the help of bibliometric study, from which performance analysis and table gram datawill be taken into account for the discussions. As a result, the paper will distil the factor of future related scope and the importance of AI on consumer behaviour and marketing strategiesand the scoop high of the authors' demand on this booming topic.

Keywords: AI, Consumer Behaviour, Marketing Strategies, Bibliometric Analysis

Introduction

Artificial intelligence (AI) has completely changed several industries. Analysis of customer Behaviour and marketing techniques is one area where AI has had a particularly big impact. The development of AI technology has given companies access to strong tools for data analysis, consumer Behaviour understanding, and the creation of winning marketing campaigns. In this extensive period, the market explores the consequences of this technology on organizations and the research opportunities it brings, delving into the tremendous impact of AI on customer Behaviour analysis and marketing techniques.

Consumer behaviour analysis is the study of individuals or groups and the processes they use to choose, secure, utilise, and discard items, services, experiences, or ideas that meet their needsand desires. Historically, corporations used surveys, focus groups, and market research to understand consumer behaviour. However, AI has changed this process by giving real-time and precise information about consumer preferences.

AI algorithms can collect and analyse massive volumes of consumer data from a variety of sources, including social media, online shopping platforms, and customer reviews. This information includes demographics, browsing history, purchasing habits, and sentiment analysis. Businesses that analyse this data can obtain a better knowledge of their customers' preferences, interests, and motivations. Furthermore, AI-powered recommendation systems have become a necessary component of e-commerce platforms. These systems utilise machine learning algorithms to analyse consumer data and make personalised product suggestions. Businesses that understand individual preferences and purchasing history can provide individualised recommendations, enhancing conversion and customer happiness.

In addition to personalised recommendations, AI can assess consumer sentiment by monitoring social media platforms, online reviews, and customer feedback. Sentiment analysis algorithmscan detect positive, negative, or neutral attitudes about a brand or product. This data enables firms to assess consumer happiness, identify areas for development, and create focused marketing campaigns.

AI has also transformed marketing methods, allowing companies to construct more focused advertising campaigns. Businesses may provide personalised ads to specific target audiences by analysing consumer data and behavioural patterns, enhancing marketing effectiveness and lowering ad spend waste. This level of precision enables firms to target the appropriate customers at the right moment, maximising return on investment.

Furthermore, AI-powered chat bots and virtual assistants have revolutionized customer care and assistance. These sophisticated technologies can respond instantly to client inquiries, make product recommendations, and help with purchasing decisions. Businesses that provide

personalised and fast customer service can increase customer satisfaction and loyalty. Predictive analytics is another important application of AI in marketing strategy. AI systems can forecast consumer behaviour and trends based on past data and patterns. This enables firmsto anticipate client wants, improve inventory management, and create proactive marketing plans. Predictive analytics may also assist firms detect possible churn concerns and create retention tactics to keep key clients. The ramifications of AI for consumer behaviour analysis and marketing initiatives are far-reaching. Businesses can now acquire previously unreachableinsights into consumer tastes and behaviour by collecting and analysing massive volumes of data. This creates new paths for research and exploration into consumer decision-making processes, the impact of AI on consumer behaviour, and the efficacy of AI-driven marketing methods.

Researchers can investigate the ethical issues surrounding AI in consumer behaviour analysis and marketing techniques. Privacy concerns and data security are significant challenges that must be addressed in order to ensure the appropriate usage of AI technology. Furthermore, potential bias in AI algorithms and decision-making processes should be investigated to ensurefair and unbiased treatment of consumers. Furthermore, the influence of AI on various consumer categories and sectors might be investigated. AI has the potential to transform industries outside e-commerce, including healthcare, banking, and entertainment. Understanding how AI effects consumer behaviour in these many scenarios might provide useful insights for businesses and governments.

Reading to the context, Artificial intelligence has had a tremendous impact on consumer behaviour and marketing techniques. AI can analyse large amounts of data to uncover trends and preferences, allowing firms to make data-driven decisions and tailored marketing efforts to increase sales and ROI[2]. AI can predict consumer behaviour and streamline the purchasing process, resulting in enhanced customer happiness and loyalty [3]. Marketers can utilise AI to generate time-limited offers, identify influencers, and analyse creative material to increase customer engagement and targeted marketing campaigns[5]. The merging of AI and cognitive biases has the potential to transform marketing, opening up new avenues for delivering impactful and targeted campaigns[5]. Overall, artificial intelligence is altering the marketing landscape, allowing marketers to make wiser decisions faster and forecast client behaviour more precisely.

As AI advances, its impact on consumer behaviour analysis and marketing techniques will only grow stronger, influencing the future of the business landscape.

Literature Study

Several research papers have looked into the impact of artificial intelligence (AI) on consumer behaviour and marketing techniques. These studies emphasise that AI applications in marketing enable the establishment of customised and human-centred marketing strategies, resulting in more meaningful customer interactions. AI in digital marketing has been found to affect consumer behaviour by improving the online customer experience across the customer's decision path. This hybrid study highlights the importance of AI in understanding and forecasting

consumer behaviour. Overall, the literature emphasises AI's revolutionary potentialfor affecting consumer behaviour and revolutionising marketing tactics.

1. AI AND CONSUMER BEHAVIOUR

Research title: The Influence of Artificial Intelligence on Customer Experience (Study of Maxim Users in Surabaya, East Java)

Author: Candra Astra Terenggana

Journal: Economics Studies and Banking Journal (DEMAND), 2024

Perspectives:

This study has important implications for both academia and industry, giving light on the revolutionary potential of Artificial Intelligence (AI) in improving customer experience (CX) in transport services, notably the Maxim application in Surabaya. The study highlights the tremendous impact of AI on CX by studying its use in personalising services, boosting operational efficiency, and rapidly responding to consumer requests. The study shows, using a deductive method that includes surveys, interviews, and data analysis, that AI allows for greater personalisation and more adaptive user experiences, eventually increasing customer satisfaction. Furthermore, the study highlights the significant improvements in CX and subsequent business prospects enabled by AI integration in Maxim's transportation operations.However, the study emphasises the significance of resolving ethical concerns and data securityissues related to AI deployment. This paper provides a complete review of AI's role in improving customer experiences in transport services, providing significant insights for both researchers and industry practitioners looking to use AI successfully to produce outstanding CX in Surabaya and beyond.

Research title: Artificial intelligence, firms, and consumer behaviour: A surveyAuthors: Laura Abrardi, Carlo Cambini, Laura Rondi
Journal: Journal of Economic Surveys, 2022 - Wiley Online Library

Perspectives:

The rapid breakthroughs in Artificial Intelligence (AI) are poised to transform economies around the world, posing significant problems for policymakers to handle. This paper investigates the complex economic implications of AI's recent technological advances, notablyin machine learning applications. Initially, it examines AI's impact on businesses, including its effects on labour markets, productivity dynamics, skill distributions, and innovation landscapes. It also looks into the function of artificial intelligence in modifying consumer behaviours and shifting market rivalry paradigms. By evaluating the expanding literature on these complex economic repercussions, the study provides insights into prospective labour market shifts, algorithmic biases introduced or corrected, and market competitiveness implications. As a result, authorities must devise methods to control the disruptive changes brought about by AI, both now and in the

future. Effective policies must address the changing landscape so that businesses and consumers can adapt and grow in the face of AI's revolutionary forces.

Research Title: AI in Consumer Behaviour

Authors: Dimitris C. Gkikas and Prokopis K. Theodoridis Journal: Advances in Artificial Intelligence, 2022 – Springer

Perspectives:

The use of Artificial Intelligence (AI) into marketing techniques signifies a significant shift in how firms interact with customers in the quickly changing world of e-commerce. As the volume of data collected everyday increases to unprecedented levels, standard statistical methods become insufficient for processing and generating insights. As a result, the rise of big data analytics combined with AI, specifically machine learning and data mining technologies, has transformed marketing methods. AI enables advanced data analysis and improves decision- making processes, giving CEOs crucial tools for analysing consumer behaviour and optimising marketing efforts. The use of artificial intelligence (AI) into marketing strategies represents a fundamental shift in how businesses connect with customers in the fast-changing world of e- commerce. As the volume of data generated every day grows to unprecedented proportions, typical statistical methods become insufficient for processing and generating insights. As a result, the rise of big data analytics, paired with AI, particularly machine learning and data mining technologies, has revolutionised marketing strategies. AI provides enhanced data analysis and improves decision-making processes, providing CEOs with critical tools for monitoring consumer behaviour and optimising marketing efforts.

Research Title: AI increases unethical consumer Behaviour due to reduced anticipatory guilt

Authors: TaeWoo Kim, Hyejin Lee, Michelle Yoosun Kim, SunAh Kim & Adam Duhachek

Journal: Journal of the Academy of Marketing Science, 2022

Perspectives:

The study of the impact of artificial intelligence and robotic technologies on customer behaviour has substantial implications for both the service industry and ethical concerns. This study illuminates the complicated dynamics between technology and morality by investigating how interactions with non-human creatures influence customers' proclivity for immoral behaviour. The findings show that interacting with nonhuman entities, such as AI and robots, may reduce anticipatory emotions of guilt, raising the risk of unethical consumer behaviour. Furthermore, the study demonstrates the subtle significance of anthropomorphism in preventing unethical behaviour, emphasising the importance of humanising non-human beings in order to maintain ethical standards. These discoveries not only influence service industry behaviour, but also spark

broader debates about the ethical implications of technological breakthroughs. As AI and robotics become more widely used in society, regulators, businesses,and consumers must comprehend their impact on consumer behaviour and ethical decision- making. This study emphasises the relevance of ethical considerations in technological innovation and advocates for proactive efforts to reduce potential ethical dangers linked with non-human agents in the service industry.

Research Title: A Model of Consumer Perception and Behavioural Intention for AI Service

Authors: Shu-Mei Wang, Yu-Kai Huang, Chi-Cheng Wang

Journal: MSIE '20: Proceedings of the 2020 2nd International Conferenceon Management Science and Industrial Engineering, April 2020

Perspectives:

The widespread use of artificial intelligence (AI), as proven by the success of AlphaGo and the development of smart devices such as speakers, demonstrates the rapid expansion and diversification of AI applications. From speech recognition to natural language processing, AI technologies are revolutionising a variety of industries, including retail with the introduction of smart supermarkets. Despite their critical role in easing human-machine communication and service interfaces, there is still a void in the available literature on the implications of AI application services across industries. This vacuum emphasises the need for additional researchto better understand the potential consequences and problems of AI integration. By filling this gap, academics can gain useful insights about the effects of AI on a variety of industries, including physical bookstores. The offered management techniques based on model analysis provide realistic answers for increasing the operational efficiency and competitiveness of traditional organisations in the face of AI-driven transformation. As a result, understanding theimplications of AI services across businesses is critical for driving strategic decision-making and fostering innovation in the rapidly expanding AI landscape.

2. AI AND MARKETING STRATEGIES

Research Title: The Impact of Digital Transformation on Consumer Behaviour And Marketing Strategies

Author: Haudi Haudi

Journal: Journal of Economic Literature, 2024Perspectives:

The author's research into the influence of digital transformation on customer behaviour has important implications for firms operating in today's fast changing landscape. By investigatingthe various effects of digital transformation on decision-making processes, brand interactions,and overall consumer experiences, the study sheds light on the dynamic link between technology improvements and changing customer expectations. Furthermore, by investigatingthe adaptive

techniques used by marketers, such as the use of data analytics, artificial intelligence, and omnichannel approaches, the study provides practical advice for firms looking to traverse the complexity of the digital age. These findings highlight the necessity of developing effective marketing strategies that correspond with the new consumer landscape, allowing businesses to remain competitive while meeting the changing needs of their target audience. Overall, the study provides useful insights that help guide strategic decision-making and promote success in the digital economy.

Research Title: AI-Enabled marketing capabilities and the hierarchy of capabilities: Conceptualization, proposition development, and research avenues

Authors: K.T. Manis a, Sreedhar Madhavaram Journal: Journal of Business Research, 2023

Perspectives:

This study gives important insights into the role of technology, namely Artificial Intelligence (AI), in enabling marketing skills. The paper explains how AI promotes the development and improvement of marketing capabilities by integrating literature from marketing, information systems, engineering, and computer science disciplines. The research provides a complete knowledge of how automation underlies AI operations by conceptualising AI, AI-enablement, and AI-enabled marketing capabilities, as well as developing an automation hierarchy structure. Furthermore, the study creates an integrative framework for AI-enabled marketing skills, demonstrating how AI operations can accelerate businesses towards higher-order capabilities. By applying AI operations to exemplar marketing skills, the research offers propositions that highlight commonalities and paths for businesses to use AI to advance their marketing capabilities. Overall, this study adds to theoretical understanding while also providing practical insights for businesses looking to leverage the power of AI to improve their marketing efforts. It also indicates future research opportunities, allowing for more exploration and refining of AI-enabled marketing techniques.

Research Title: Artificial intelligence in marketing: A systematic literature reviewAuthors: Srikrishna Chintalapati and Shivendra Kumar Pandey
Journal: International Journal of Market Research, 2021

Perspectives:

This article sheds light on the revolutionary role of Artificial Intelligence (AI) in marketing, providing a detailed review of the various uses and impact of AI-powered marketing campaigns. The report defines the scope of areas where AI is used to promote innovation and improve marketing outcomes by categorising it into five functional themes and 19 sub- functional topics. The article does a systematic literature analysis to assess a large body of research articles, ranking them based on coverage, impact, and relevance. By explaining findings across sectors and research contexts, the study not only informs practitioners about the current status of AI-powered

marketing, but also provides recommendations for future research efforts. The identification of 170 featured use cases demonstrates the diverse nature of AI's contributions to marketing, as well as its ability to produce higher-quality outcomes andexperiences. Overall, this study advances both academic understanding and practical implementations by providing a road map for navigating the changing terrain of AI-enabled marketing strategies and supporting ongoing transformation in the marketing sector.

3. Impact Analysis of AI on Consumer Behaviour Analysis and Marketing Strategies

The study began by analysing the influence of AI from the perspectives of numerous authors in order to gain a clear and concise understanding of their ideas and progressive content, as well as the research effect.

a. How does AI influence consumer Behaviour analysis?

AI has transformed the way businesses analyse consumer behaviour, allowing retailers to make more educated decisions to satisfy client demands. AI-powered solutions enable businesses to analyse massive amounts of client data, such as purchasing behaviour, preferences, and spending habits [1][2]. AI-driven personalisation tailors marketing techniques to individual consumer preferences, resulting in higher customer happiness and loyalty [1][3]. The emergence of ethical consumerism in the AI era has boosted demand for data privacy, resultingin a greater need for openness in how organisations use customer data [4]. Understanding consumer mood allows businesses to modify their marketing strategies and improve their product offers [1]. AI technologies provide deeper insights into consumer preferences, allowingbusinesses to create customised experiences to customers [1]. The incorporation of AI can address issues connected with consumer behaviour analysis and aid in understanding customerpurchasing behaviour [3][2]. AI algorithms can analyse consumer feedback from reviews, social media posts, and online forums. AI-generated customised ads can impact purchasing decisions and increase client engagement [1]. Overall, artificial intelligence (AI) is having an increasing impact on consumer behaviour and marketing [1][3]. However, it is vital to emphasise that the benefits of AI in consumer behaviour analysis are realised when paired withhuman-generated data and information [3].

b. What are the advantages of using AI in developing marketing strategies?

The application of AI in building marketing strategy provides several benefits to firms. One ofthe key advantages is that AI technology can assist strengthen brand-customer interactions byoffering insights into customer behaviour and preferences [5]. Furthermore, AI can streamlinemarketing operations, helping organisations to improve the effectiveness of their marketing campaigns [5][2]. Better ROI can be gained by targeting ads to audiences that are most likely to convert [5]. AI analyses user behaviour to optimise ad placement, format, and targeting [5][6]. AI computers

can evaluate and analyse huge datasets in real time, revealing patterns, trends, and correlations that human marketers may miss [5]. As a result, AI-based insights allowmarketers to make data-driven decisions, adapting their marketing plan to meet consumer preferences [5]. Another benefit of employing AI in marketing is that it can automate the marketing process, freeing up important time for marketing professionals to concentrate on more complicated duties and increasing campaign efficiency [2]. Finally, AI-driven marketinginitiatives can enhance conversions and revenue, while offering readily available information and insights to aid in decision making [5].[6][2]. To summarise, the use of AI in building marketing strategies is becoming increasingly crucial for firms, as it provides considerable benefits in terms of efficiency, customer insights, and enhanced results. [5][3].

c. In what ways can AI be utilized to personalize marketing efforts for different consumer segments?

Personalised marketing is an essential component of any marketing plan since it may connect with individual customers on a deeper level, resulting in improved conversion rates. AI- powered tools and algorithms can collect and analyse massive amounts of data from a variety of sources, including website interactions, social media, and purchase history, allowing them to build highly personalised marketing campaigns at scale [7]. AI can tailor marketing efforts to different consumer segments by analysing each user's behaviour and preferences [7]. AI- powered technologies can analyse consumer behaviour patterns and preferences based on their online actions, providing customers with more personalised experiences [7][6]. Furthermore, AI can be used to predict what customers want or need by analysing data patterns and trends to determine future customers' interests, preferences, and purchasing habits [7][6]. Businessescan use AI in marketing to produce highly focused campaigns adapted to individual customers'requirements and interests, resulting in a higher return on investment (ROI) [7]. Personalised marketing tactics can be further optimised by adapting messaging and content to specific targetaudiences based on AI analysis [7]. To summarise, AI can personalise marketing efforts for various consumer segments by leveraging massive data sets to better anticipate client requirements and preferences [6].

According to the above impact analysis, the paper discovered how AI has influenced the author's mindset about consumer behaviour and marketing strategies, which has also influencedthe various authors to direct themselves to write and research around the topic of AI and marketing concept, which serves as the medio core between publishing, researching, and citation arenas.

Bibliometric study

Researchers may feel overwhelmed by the need to keep track of the vast amount of material available in their field. Furthermore, the illustrative nature of these approaches makes them less effective in synthesising literature. Therefore, evaluating and synthesising material is crucial for developing a subject of study. This paper uses bibliometric techniques to analyse existing literature on the topic.

Bibliometric analysis is a valuable technique for evaluating the intellectual structure and trendsin

a field (Baker et al., 2021; Donthu et al., 2021a; Mustak et al., 2021). This work evaluates AI applications in marketing using bibliometric analysis. As the field grows, bibliometric analysis can identify current trends and emerging research paths.

This paper evaluates AI applications in consumer behaviour and marketing strategies using bibliometric analysis. As the field grows, bibliometric analysis can assist in identifying current trends and new research paths.

The bibliometric technique analyses bibliographic data to detect trends and citations in a certain region by year, nation, researcher, source, technique, ideology, and study topic (Donthu et al., 2021a; Paul & RialpCriado, 2020). Bibliometric analysis is widely used in research fields suchas competitive intelligence, digital marketing, industrial marketing management and many study fields (Gao et al., 2021; Heras-Rosas & Herrera, 2021; Lopez et al., 2019; Mora et al., 2021; Troisi et al., 2019). Donthu et al. (2021a) categorize bibliometric methods as performance analysis, science mapping, and network analysis. The current study will use performance analysis to detect growing tendencies in the paper's agenda.

Data Collection

The first stage in a bibliometric study is to choose a suitable and credible source from which topull literature (Morant et al., 2017). This work extracted literature from the Scopus scientific database. Scopus is considered as the most comprehensive database in literature (Norris & Oppenheim, 2007), and experts use it for bibliometric analysis in a range of areas (Donthu et al., 2021b; Kim & Lim, 2019; Kumar et al., 2019; Purchase & Volery, 2020; Troisi et al., 2019).Furthermore, Scopus is an interdisciplinary directory that includes almost 69 million archives.The second step is to choose relevant keywords to avoid unrelated articles and make the final analysis reliable and simple to process.

Data Filtration

Articles from the Scopus database between 1988 and 2024 were translated to an Excel file for organisation and removal of entries without an author, repetitive entries, and errors. Articles were also filtered using a period frame of 2000:2024; articles that did not fit into the area were eliminated. After manually cleaning the data in Excel, the articles published within the desired time frame were selected for final analysis and interpretation.

Analysis and interpretation

The current article will use performance analysis to discover growth trends in selective marketing zones, which represent consumer behaviour and AI-based marketing techniques. Performance analysis, citation analysis, word analysis, and scientific production were carried out using an analytical tool after selecting the top articles based on a citation criterion of at least one. The authors manually analysed the top 20-25 most referenced articles to ascertain the research methods employed by the researchers. Articles from each cluster were evaluated and analysed

for intellectual structure.

The analysis and interpretation were divided into two components to improve the research: AIand consumer behaviour and AI and marketing tactics. The first analytical study and interpretation will be performed on AI keywords connected to consumer behaviour study, ranging from annual scientific production to main information info with citation analysis.

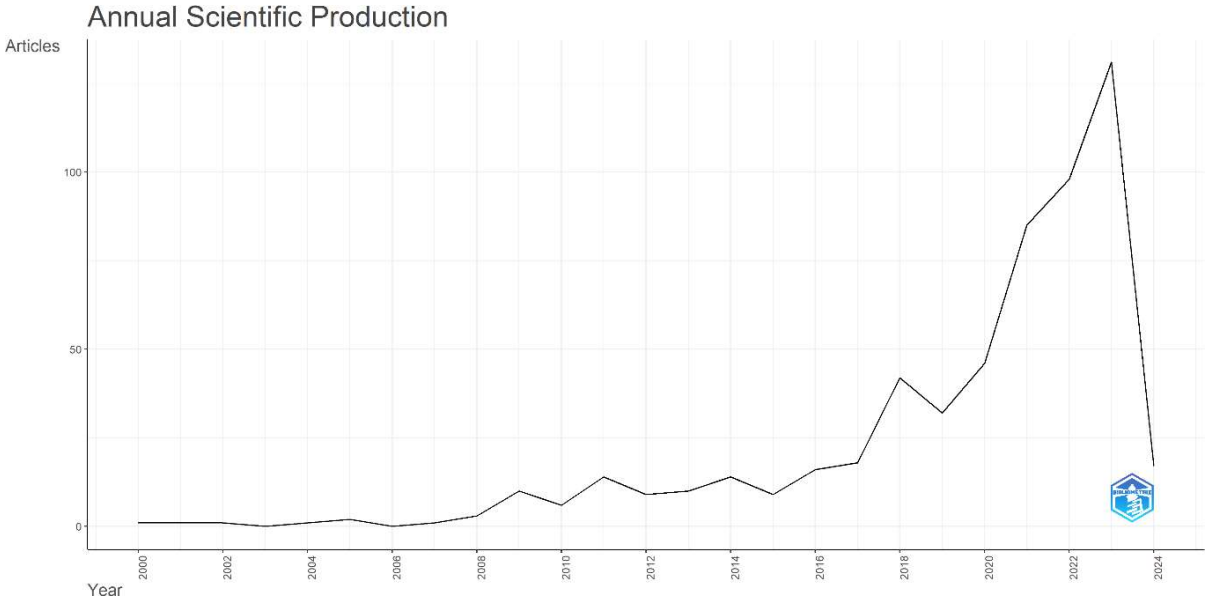

FIGURE1: Annual/Yearly publication trend. (AI&CB)

Figure 1 displays the pattern of annual/year-by-year publications in AI in the marketing domain [consumer behaviour], indicating that publications in the field have gradually increased over time. For example, from 2000 to 2010 (the first ten years of our study), the average publishingrate was 3.2 per year. The paucity of research interest in this subject during that period could be attributed to the delayed development in technology diffusion. Because this was the beginning of industry 3.0 and technological advancements had just recently begun to influenceenterprises (Bruckner et al., 2017), the emphasis was on technology development rather than academic research. This topic has grown in prominence as a result of industry 4.0 and recent advances in artificial intelligence and its applications in business. The repercussions of this evolution may be seen in the average number of publications per year between 2010 and 2024(the past 14 years in our data), which climbed dramatically but at a moderate rate, but soared in the last three years at a higher rate.

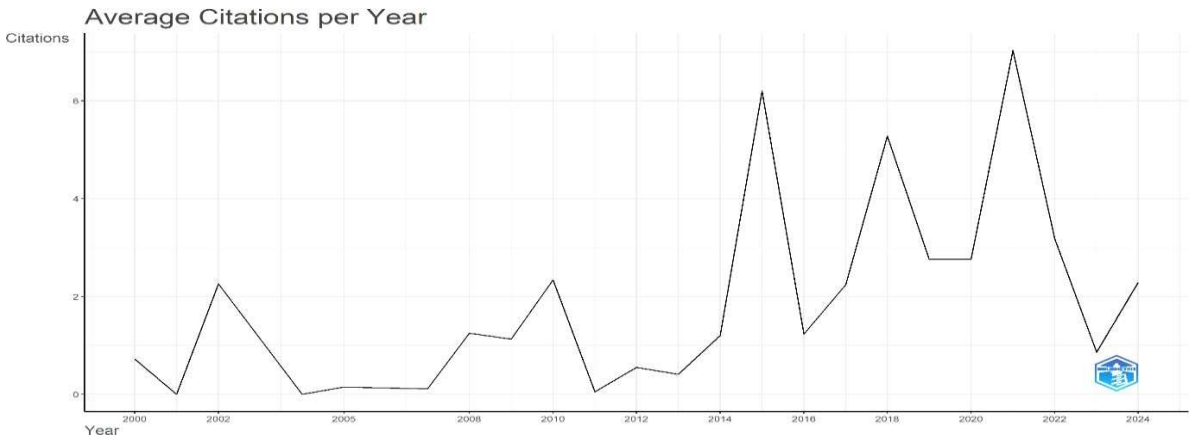

FIGURE 2: Average Citations per year (AI&CB)

The above figure clearly shows that as the year of technology and innovation progressed, the author's citations and research effort increased year after year. Citations of articles reached a modest peak in 2022, but then fell, with swings in growth in subsequent years. However, beginning in 2014, the patterns of citations and publications shifted, and despite significant fluctuations, the growth trend has continued to rise to a peak range.

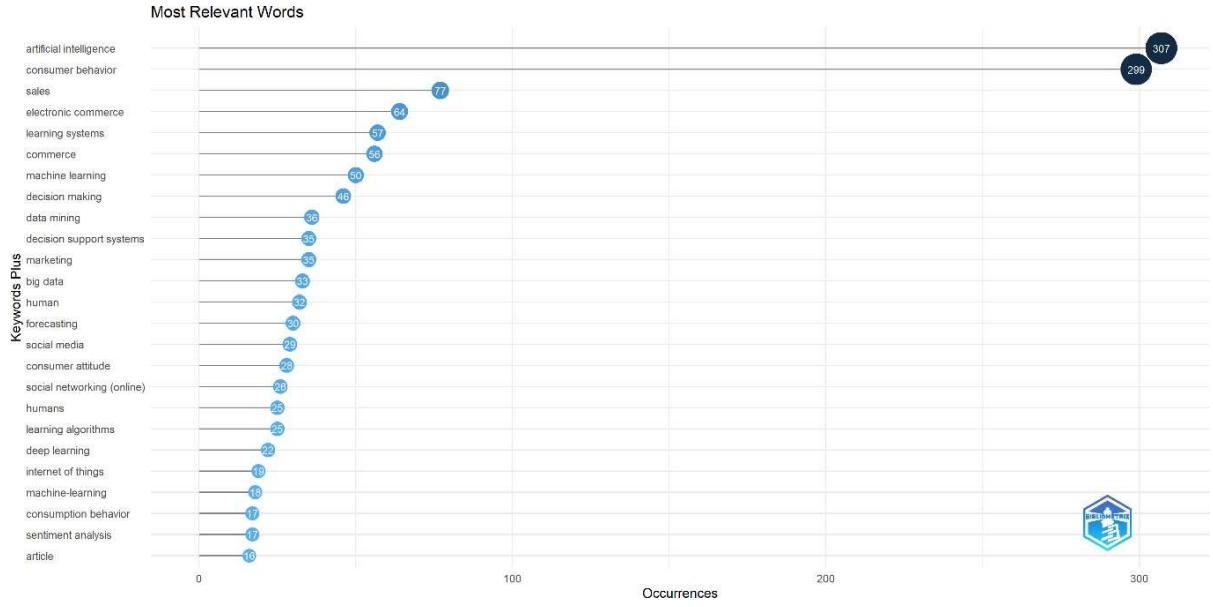

FIGURE 3: Most Relevant words used by Author's (AI&CB)

Figure 3 shows how the data for the most relevant words may be easily identified by the most recent marketing behaviour. It's clear that "artificial intelligence" and "consumer behaviour" are the most commonly discussed themes, with 307 and 299, respectively. This indicates a strong

interest or focus on these subjects within the analysed context. Furthermore, the terms "sales," "electronic commerce," and "marketing" appear frequently, implying a relationship tobusiness or commercial issues. Other phrases such as "data mining," "machine learning," and "big data" emphasise the significance of data-driven techniques and technologies. Overall, thisanalysis sheds light on the most prominent themes and areas of emphasis in the dataset, identifying trends and areas of interest in the domain under consideration.

Bradford Law's Table represents the core sources of journals and their frequency with ranks and zones representing AI and consumer behaviour, the prominent keywords.

SO	Rank	Freq	Cum Freq	Zone
LECTURE NOTES IN COMPUTER SCIENCE (INCLUDING SUBSERIES LECTURE NOTES IN ARTIFICIAL INTELLIGENCE AND LECTURE NOTES IN BIOINFORMATICS)	1	20	20	Zone 1
ACM INTERNATIONAL CONFERENCE PROCEEDING SERIES	2	13	33	Zone 1
ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING	3	8	41	Zone 1
JOURNAL OF BUSINESS RESEARCH	4	8	49	Zone 1
LECTURE NOTES IN NETWORKS AND SYSTEMS	5	8	57	Zone 1
SUSTAINABILITY (SWITZERLAND)	6	8	65	Zone 1
2011 2ND INTERNATIONAL CONFERENCE ON ARTIFICIAL INTELLIGENCE, MANAGEMENT SCIENCE AND ELECTRONIC COMMERCE, AIMSEC 2011 - PROCEEDINGS	7	7	72	Zone 1
FRONTIERS IN PSYCHOLOGY	8	7	79	Zone 1
IEEE ACCESS	9	7	86	Zone 1
TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE	10	7	93	Zone 1
LECTURE NOTES IN ELECTRICAL ENGINEERING	11	6	99	Zone 1
PROCEDIA COMPUTER SCIENCE	12	6	105	Zone 1
STUDIES IN HEALTH TECHNOLOGY AND INFORMATICS	13	6	111	Zone 1
AIP CONFERENCE PROCEEDINGS	14	5	116	Zone 1

COMPUTERS IN HUMAN BEHAVIOR	15	5	121	Zone 1
DEVELOPMENTS IN MARKETING SCIENCE: PROCEEDINGS OF THE ACADEMY OF MARKETING SCIENCE	16	5	126	Zone 1
JOURNAL OF RETAILING AND CONSUMER SERVICES	17	5	131	Zone 1
CEUR WORKSHOP PROCEEDINGS	18	4	135	Zone 1
ENERGIES	19	4	139	Zone 1
IFIP ADVANCES IN INFORMATION AND COMMUNICATION TECHNOLOGY	20	4	143	Zone 1
PSYCHOLOGY AND MARKETING	21	4	147	Zone 1
SMART INNOVATION, SYSTEMS AND TECHNOLOGIES	22	4	151	Zone 1
DECISION SUPPORT SYSTEMS	23	3	154	Zone 1
ELECTRONIC COMMERCE RESEARCH	24	3	157	Zone 1
HANDBOOK OF RESEARCH ON APPLIED DATA SCIENCE AND ARTIFICIAL INTELLIGENCE IN BUSINESS AND INDUSTRY	25	3	160	Zone 1

Table1: Bradford law's core sources (AI&CB)

Based on the data presented above, it looks to be a rating of scholarly papers from diverse subjects. Each publication is listed with its rank, frequency (presumably the number of times it appears or is cited), cumulative frequency, and zone identification. Analytically, we can see that "Lecture Notes in Computer Science," "ACM International Conference Proceeding Series," and "Advances in Intelligent Systems and Computing" have relatively high frequencies and ranks, implying that they are influential in their respective domains. Furthermore, the cumulative frequency reflects their overall impact on the dataset. The zone designation may denote several classifications or groupings, maybe based on subject areas or impact levels. Publications in Zone 1 tend to have higher frequencies and rankings than those in other zones,reflecting their importance in the dataset. Further investigation could include looking into trends in publishing frequencies across different zones or discovering patterns in the types of publications that dominate each zone.

AI & MARKETING STRATEGIES ANALYSIS

The second analytical investigation and interpretation will focus on AI keywords related to marketing strategies. From annual productions to citation research, marketing startups using AI have established a marketing tactic trend throughout the buying industry. The people have become increasingly linked to AI behaviour when engaging in any marketing plan, whether itis for veggies, the real estate market, or even cryptocurrencies and stock market trading.

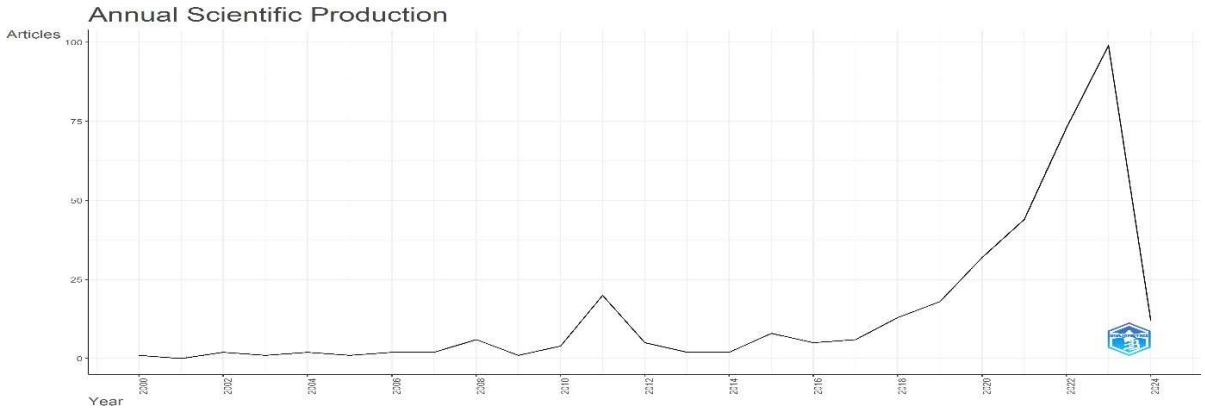

FIGURE 4: Annual/Yearly publication trend (AI & MS)

Figure 4 shows a noteworthy trend in the number of articles produced over the years. Between 2000 and 2009, activity was quite low, with irregular peaks and declines in the quantity of publications. However, since 2010, there appears to be a large increase in the number of publications produced each year. This trend accelerates from 2015 onwards, with a significant increase in publications, peaking in 2023 with 99 articles. However, there appears to be a dramatic reduction in the number of papers published in 2024, which may necessitate additional analysis to determine the root causes.

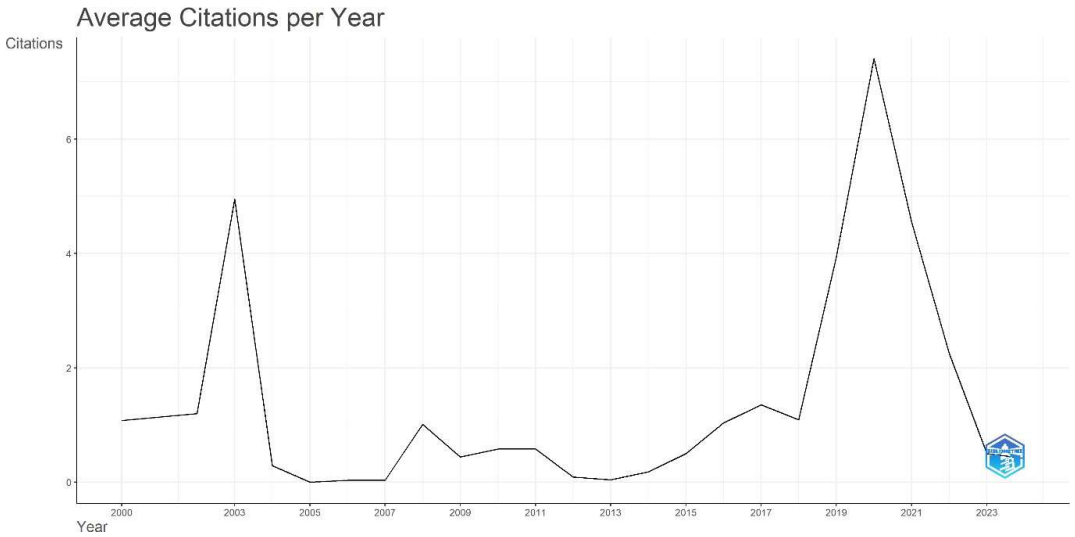

FIGURE 5: Average Citations Per Year (AI & MS)

Figure 5 depicts the historical changes in Mean Total Citations (MeanTC) per Article, the number of Citable Years, and Mean Total Citations per Year from 2000 to 2024.

Here's the analytical interpretation:

1. Mean total citations per article (MeanTCperArt) This measure displays the average number of citations that each article receives. There is significant variance over time, ranging from 0 to 109, reflecting changes in the impact or reception of the articles released.
2. Citable years: This column shows the number of years in which citable articles were published. The falling trend indicates either a decrease in publishing production or a drop in the number of years used for citation analysis.
3. Mean Total Citations per Year (MeanTCperYear): This indicator represents the average number of citations obtained annually across all articles. The values vary greatly, implying changes in the overall impact or attention received by the articles over time.
4. Yearly Trends: The statistics reveal shifting trends in MeanTCperArt and MeanTCperYear, with some years experiencing peaks and others having little to no impact. This could represent shifts in research focus, citation practices, or the appearance of influential publications in specific years.

Overall, the data shows dynamic trends in citation measures over time, reflecting changes in research impact and attention within the topic under consideration. Further research could look into the mechanisms that are causing these temporal variations, as well as the implications for scholarly activity and effect.

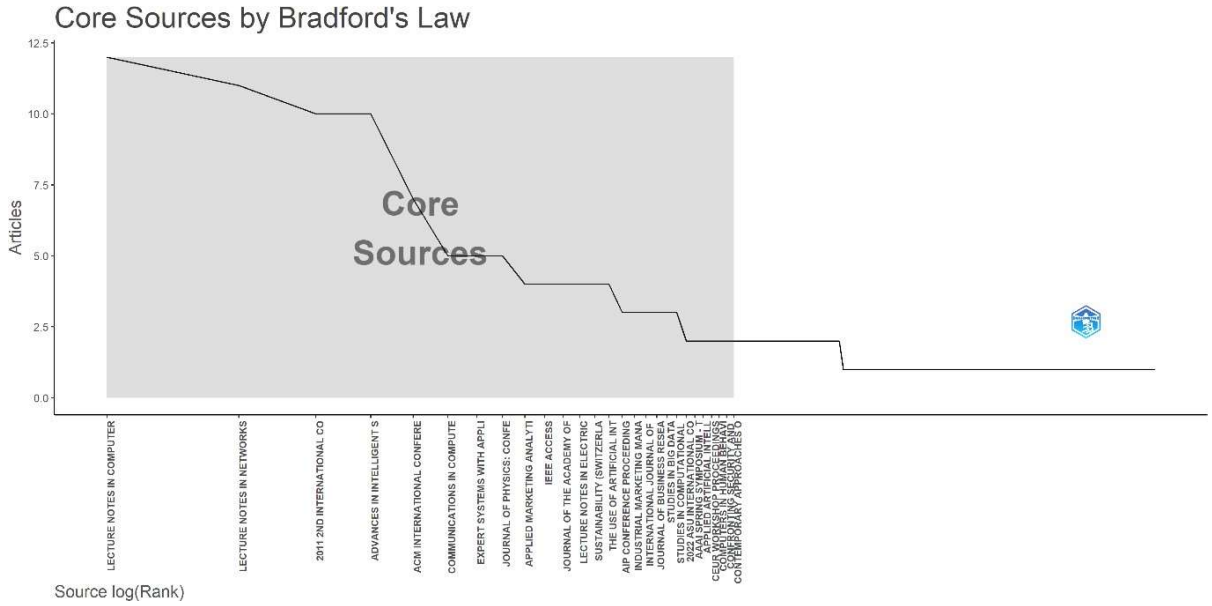

FIGURE 6: Core Sources by Bradford's Law (AI & MS)

Based on the information supplied, it appears that it is a ranking of publications or conference proceedings in computer science, artificial intelligence, and related fields. The data contain each

publication's rank, frequency of appearance, cumulative frequency, and zone. In the above data, we can see that computer science and artificial intelligence publications dominate, with Lecture Notes in Computer Science being the most common, followed by Lecture Notes in Networks and Systems and various conference proceedings. This implies a heavy emphasis on academic conferences and journals in these subjects, indicating vigorous research and scholarly engagement in areas such as artificial intelligence, networking, and computing systems. Furthermore, the distribution of publications throughout different zones may reflect the geographical spread or priority areas of the research institutions that contributed to these publications.

Future Research Route

The existing literature in the topic focuses mostly on AI-based applications to improve marketing techniques, but there is a vacuum in understanding their implementation. Researchers must focus on preparing organisations for this technological upheaval (S.Anayat & G. Rasool, 2022). While AI's impact on business sectors is acknowledged, there is a lack ofreal-world implementation examples in the literature. Implementing AI without comprehending its principles can jeopardise privacy and security (Vimalkumar et al., 2021). Marketers, who are largely from management backgrounds, lack a thorough understanding ofAI algorithms and how they work. This knowledge gap could result in operational and strategicfailures. Researchers must analyse the feasibility of AI application in marketing, assisting organisations in upskilling stakeholders for optimal use. Researchers note the growing fear about the increasing integration of AI and automation into numerous elements of economic andsocietal advancement, with legitimate worries highlighted (Letheren et al., 2020). Practitionersin the field of digital marketing must apply caution and sensibility, as they recognise their critical role in data collecting and utilisation.

Further Scope

Future study in this area should investigate the long-term consequences of AI on customer behaviour, as well as the ethical issues of employing AI in marketing. Additionally, research should look into the potential for AI to personalize marketing activities and boost customer retention. The future scope of AI in consumer behaviour analysis and marketing tactics is expected to grow significantly between 2023 and 2024. AI is predicted to play a critical role in helping marketers better understand customer behaviour and experiences, offering real-time solutions, and building engaging communication channels that can automate on-demand jobs and collect correct information for data analysis. Furthermore, the use of AI in marketing is expected to contribute to a 25% boost in consumer satisfaction within organisations that use AIby 2023, according to Gartner research. Future researchers are anticipated to focus on developing AI-powered applications that improve user understanding, predictive analytics, andthe production of hyper-personalized marketing experiences. Furthermore, future researchers will play an important role in advancing the development and ethical application of AI in consumer behaviour analysis and marketing strategies, as well as investigating the potential ofAI-driven natural

language models to improve consumer engagement and voice search optimisation. As a result, the future of artificial intelligence in consumer behaviour analysis and marketing tactics looks promising, with future researchers playing an important role in driving innovation and addressing growing difficulties.

References

Websites

https://www.invoca.com/blog/the-future-of-marketing-predicting-consumer-behavior-with-ai [a][6]

https://aicontentfy.com/en/blog/predicting-customer-behavior-with-power-of-ai-marketing-tools [b][2]

https://www.sprintzeal.com/blog/how-ai-has-impacted-consumer-buying-behaviour[c]

https://www.linkedin.com/pulse/transformative-power-ai-shaping-consumer-behavior-ludovic-boisseau/[d][1]

https://www.forbes.com/sites/forbesagencycouncil/2023/09/15/how-ai-will-help-marketers-harness-psychology-to-drive-consumer-purchase-decisions/?sh=12a7f5d21cdd[e]

https://www.sciencedirect.com/science/article/pii/S2666603022000136
https://hbr.org/2021/07/how-to-design-an-ai-marketing-strategy
https://sproutsocial.com/insights/ai-marketing/
https://www.cmswire.com/digital-marketing/whats-coming-next-decade-for-ai-in-marketing/
https://journals.sagepub.com/doi/full/10.1177/14707853211018428

https://onlinelibrary.wiley.com/doi/10.1002/cb.2233?af=R

https://www.researchgate.net/publication/354198906_ARTIFICIAL_INTELLIGENCE_IN_DIGITAL_MARKETING_INFLUENCES_CONSUMER_BEHAVIOUR_A_REVIEW_AND_THEORETICAL_FOUNDATION_FOR_FUTURE_RESEARCH

https://onlinelibrary.wiley.com/doi/10.1002/cb.2248

How Artificial Intelligence Has Made Understanding Consumer Buying Behavior Easy in2024. (n.d.) Retrieved January 31, 2024, from www.sprintzeal.com[3]

AI's Impact On The Future Of Consumer Behavior And Expectations. (n.d.) RetrievedJanuary 31, 2024, from www.forbes.com[4]

Exploring the Impact of AI in Marketing. (n.d.) Retrieved January 31, 2024, from adsmith.biz/impact-of-ai-in-marketing/[5]

How AI is Revolutionizing Digital Marketing Analysis. (n.d.) Retrieved January 31, 2024,from www.adaptiveus.com/blog/ai-digital-marketing-analysis/[7]

Articles:

1. Anayat, S., & Rasool, G. (2022). Artificial intelligence marketing (AIM): connecting-the-dots using bibliometrics. Journal of Marketing Theory and Practice, 32(1), 114–135. https://doi.org/10.1080/10696679.2022.2103435

2. Baker, K. H., Kumar, S., & Pandey, N. (2021). Five decades of the journal of consumer affairs: A bibliometric perspective. The Journal of Consumer Affairs, 55(1), 293–331. https:// doi.org/10.1111/joca.12347

3. Bruckner, M., LaFleur, M., & Pitterle, I. (2017). The impact of the technological revolutionon labour markets and income distribution. Department of Economic and Social Affairs

4. Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021a). How to conduct abibliometric analy sis: An overview and guidelines. Journal of Business Research, 133(C), 285–296. https://doi.org/10.1016/j. jbusres.2021.04.070

5. Donthu, N., Kumar, S., Pandey, N., Pandey, N., & Mishra, A. (2021b). Mapping the electronic word-of-mouth (eWOM) research: A systematic review and bibliometric analysis. Journal of Business Research, 135(C), 758–773. https://doi. org/10.1016/j.jbusres.2021.07.015

6. Gao, P., Meng, F., Mata, M. N., Correia, A. B., & Correia, A. B. (2021). Trends and future research in electronic marketing: A bibliometric analysis of twenty years. Journal of Theoretical and Applied Electronic Commerce Research, 16(5), 1667–1679. https://doi.org/ 10.3390/jtaer16050094

7. Heras-Rosas, C. D., & Herrera, J. (2021). Innovation and competitive intelligence in business. International Journal of Financial Studies, 9 (2), 1–18. https://doi.org/10.3390/ ijfs9020031

8. Kim, M. J., & Lim, J. H. (2019). A comprehensive review on logo literature: Research topics, findings, and future directions. Journal of Marketing Management, 35 (13–14), 1–75. https://doi.org/10.1080/0267257X.2019.1604563

9. Kumar, V., Rajan, B., Rajkumar, V., & Jim, L. (2019). Understanding the role of artificial intelligence in persona lised engagement marketing. California Management Review, 61 (4),1–21. https://doi.org/10.1177/ 0008125619859317

10. Lopez, F. M., Merigo, J. M., Gázquez-Abad, J. C., & Ruiz-Real, J. L. (2019). Industrial marketing management: Bibliometric overview since its foundation. Industrial Marketing Management, 84 (2020), 19–38. https://doi.org/ 10.1016/j.indmarman.2019.07.014

11. Mora, H. L., Sánchez, P. P., & Camacho, M. A. (2021). The evolution of business process management: A bibliometric analysis. IEEE Access.

12. Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial intelligence in marketing:

Topic modeling, scientometric analysis, and research Agenda. Journal of Business Research,124, 389–404. https://doi.org/10.1016/j.jbusres.2020.10.044

13. Norris, M., & Oppenheim, C. (2007). Comparing alternatives to the web of science for coverage of the social sciences' literature. Journal of Informetics, 1(2), 161–169. https://doi. org/10.1016/j.joi.2006.12.001

14. Letheren, K., Bennett, R. R., & Whittaker, L. (2020). Black, white or grey magic? Our future with artificial intelligence. Journal of Marketing Management, 36(3–4), 216–232. https://doi.org/10.1080/0267257X.2019.1706306

15. Paul, J., & RialpCriado, A. (2020). The art of writing literature review: What do we know and what do we need to know? International Business Review, 29(4), 1–7. https://doi.org/ 10.1016/j.ibusrev.2020.101717

16. Purchase, S., & Volery, T. (2020). Marketing innovation: A systematic review. Journal of Marketing Management, 36(9– 10), 763–793. https://doi.org/10.1080/0267257X.2020.1774631

17. Troisi, O., Sarno, D., Maione, G., & Loia, F. (2019). Service science management engineering and design (SSMED): A semiautomatic literature review. Journal of Marketing Management, 35(11–12), 1015–1046. https://doi.org/10. 1080/0267257X.2019.1605402

18. Vimalkumar, M., Sharma, S. K., Singh, J. B., & Dwivedi, Y. K. (2021). Okay google, what about my privacy?': User's priv acy perceptions and acceptance of voice based digital assistants. Computers in Human Behavior, 120(C), 1–13. https://doi.org/10.1016/j.chb.2021.106763

BOOKS (TAKEN AS REFERENCES FOR ARTICLE)

1. "Artificial Intelligence Marketing and Predicting Consumer Choice: An Overview of Tools andTechniques" by Steven Struhl

2. "Marketing 4.0: Moving from Traditional to Digital" by Philip Kotler, Hermawan Kartajaya, andIwan Setiawan

3. "Consumer Behavior: Building Marketing Strategy" by David L. Mothersbaugh and Del I.
4. Hawkins

5. "AI for Marketing and Product Innovation: Powerful New Tools for Predicting Trends, Connecting with Customers, and Closing Sales" by A.K. Pradeep