

COMPARISON OF ADVANTAGES AND DISADVANTAGES OF CHATBOTS IN MARKETING COMMUNICATION - USING THE METHOD OF SYSTEMATIC LITERATURE REVIEW

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ABSTRACT

Advances in digital marketing have brought significant changes in the way companies promote their products and services. Chatbots have become a valuable tool in digital marketing. The aim of this paper is to research the advantages and disadvantages of chatbot communication in the field of digital marketing. The research is directed towards the analysis of chatbots which should improve user experience, increase user engagement as well as identify challenges and limitations that may arise by using them. Databases are investigated by using the methodological approach of systematic literature review (SLR) Scopus and Web of Science. The conducted search analyses identified literature related to chatbot communication in digital marketing. SLR approach ensures objectivity, systematicity, and reliability in the collection of information and research results, which contributes to existing knowledge about the application of chatbots in digital marketing and provides guidelines for their optimal use to achieve marketing goals. The review of analysed and compared scientific achievements provides a systematic presentation as a fundamental starting point for any scientific discussion in this sense, and the initiation of a more comprehensive scientific research study. Since development of digital marketing communication is expected to go in this direction, systematic review and future research are important.

KEYWORDS: chatbots, digital marketing, SLR, systematic literature review, marketing communication

1. INTRODUCTION

The modern era of technology has a tremendous impact on the society. With the creation of the ultimate virtual assistants, chatbots have become a popular entity in the conversational services [Gupta, et al., 2020.]. Chatbots are machine agents that serve as natural language user interfaces for data and service providers [Dale, 2016]. Chatbots can answer questions, provide information, solve problems, and even guide users through the shopping process. Chatbots give users the feeling of interacting with a real person but allow companies to collect data about users and their preferences. The current interest in chatbots is spurred by recent developments in artificial intelligence (AI) and machine learning [Brandtzaeg and Følstad, 2017].

1.2. BACKGROUND

Artificial intelligence, especially in the form of natural language processing chatbots, has significantly transformed digital marketing by automating customer interactions and providing personalized experiences [Dwivedi et al., 2023]. According to Todor [2016], digital marketing is defined as "the targeted, measurable, and interactive marketing of goods or services using digital technologies in order to reach and convert leads into customers and preserve them." The main objective is to promote brands, shape preference, and boost sales through several digital marketing techniques. As text-based conversational agents, chatbots allow users to interact via text messages and play a key role in service delivery in the digital marketing era. Their role is evolving to ensure a better connection with customers [Li et al., 2023]. Chatbots, as part of self-service technologies, significantly change the way companies communicate with customers by enabling automatic and personalized responses through natural language. Although users often view chatbots with scepticism, studies explore how increasing perceptions of chatbots' warmth and competence can reduce this scepticism and increase users' trust in a company. It emphasizes the importance of properly designing chatbots, including gaze direction and degree of anthropomorphism, to achieve the best marketing results and improve user experiences [Pizzi et al., 2023]. The evolution of AI in marketing can be traced back to the increasing availability of huge data sets and the computing power needed to process them. As businesses face an overwhelming amount of consumer data generated through online interactions, AI has become critical to extracting meaningful insights and translating those insights into actionable strategies. From predictive analytics to automated content creation and personalized user experiences, AI is reshaping the very structure of marketing campaigns, from their conceptualization to execution and optimization [Kim & Lee, 2020]. Moreover, many companies are starting to replace customer service employees with digital chatbots. Researchers study consumer evaluations of services provided by chatbots, using real interactions between humans and chatbots in lab and field settings, highlighting the increasing integration of artificial intelligence in marketing [Castello et al., 2023]. Todor [2016] outlines the advantages and disadvantages of digital marketing, highlighting benefits such as cost efficiency, interactivity, and a global audience reach, as well as challenges such as copyright issues, lack of trust, and dependency on technology. In this paper, the context of digital marketing and the development of generative artificial intelligence is explored to investigate the advantages and disadvantages of chatbots which have an impact on the development of digital marketing.

1.3. RESEARCH OBJECTIVES

This study aims to explore and highlight the importance of chatbots, specifically their advantages and disadvantages in digital marketing. In order to understand the use of chatbots in digital marketing communication, the research aims to answer the following questions:

1. To what extent has the scientific observation of chatbot usage been approached so far?
2. Do existing studies equally present both the advantages and disadvantages?
3. What are the key advantages and disadvantages that have a direct impact on marketing communication, and the use of chatbots in marketing?

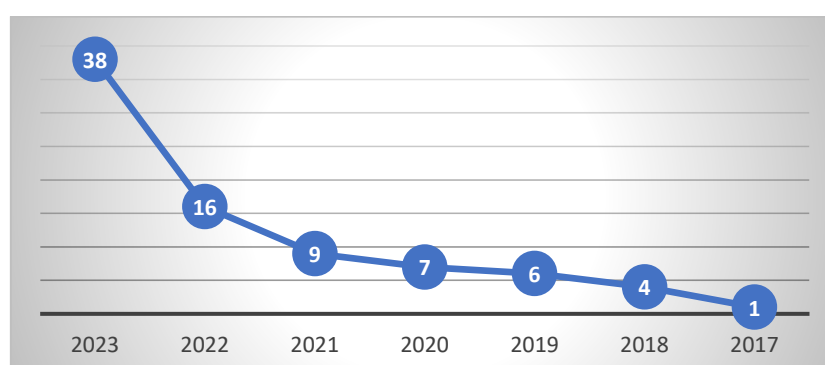
2. RESEARCH APPROACH

To investigate and review the latest developments in the field of chatbots related to digital marketing, and answer research questions, a substantial amount of literature was examined. Scopus and Web of Science (WoS) databases are investigated by using the methodological approach of systematic literature review [Snyder, 2019]. Scientific papers from the Scopus and Web of Science databases were used to gather information on the research topic, indicating significant interest among researchers in this area. According to the conducted research, the substantial role of chatbots in digital marketing is evident. The initial search using the keywords "chatbots" and "digital marketing" in Scopus and WoS databases yielded a total of 151 documents from 2017 to 2024. The next step of the search involved filtering documents by research area, focusing on Business, Management, and Accounting in the Scopus database, resulting in 45 documents. In the WoS database, the search was limited to the fields of Business and Management, leading to the identification of 38 documents. A comparison of documents revealed 8 matching titles between WoS and Scopus. Further refinement of the search criteria in both databases was conducted by restricting the results to documents with open access, resulting in a total of 25 accessible documents for further examination. Out of the 25 reviewed documents, 24 mention the advantages of chatbots, only one does not, while 21 documents list their disadvantages, indicating that 4 documents do not mention any.

3. FINDINGS

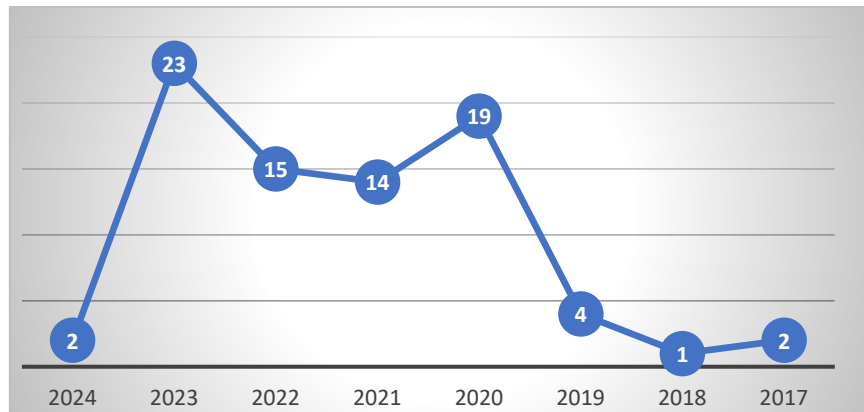
Searching the Scopus database using the approach TITLE-ABSTRACT-KEY ("chatbots") and TITLE-ABSTRACT-KEY ("digital marketing") yielded 81 scientific papers from 2017 to 2023, with searches conducted across all fields of the database (Figure 1). In the WoS database, searching the keywords "chatbots" and "digital marketing" resulted in 70 scientific papers from 2017 to 2024 across all fields (Figure 2). The total number of documents in the Scopus and WoS databases with the keywords "chatbots" and "digital marketing" resulted in 151 documents from 2017 to 2024.

Figure 1. Documents by year investigating Chatbots and Digital Marketing in the Scopus database (2017- February 2024)



Source: Authors' work: 2024

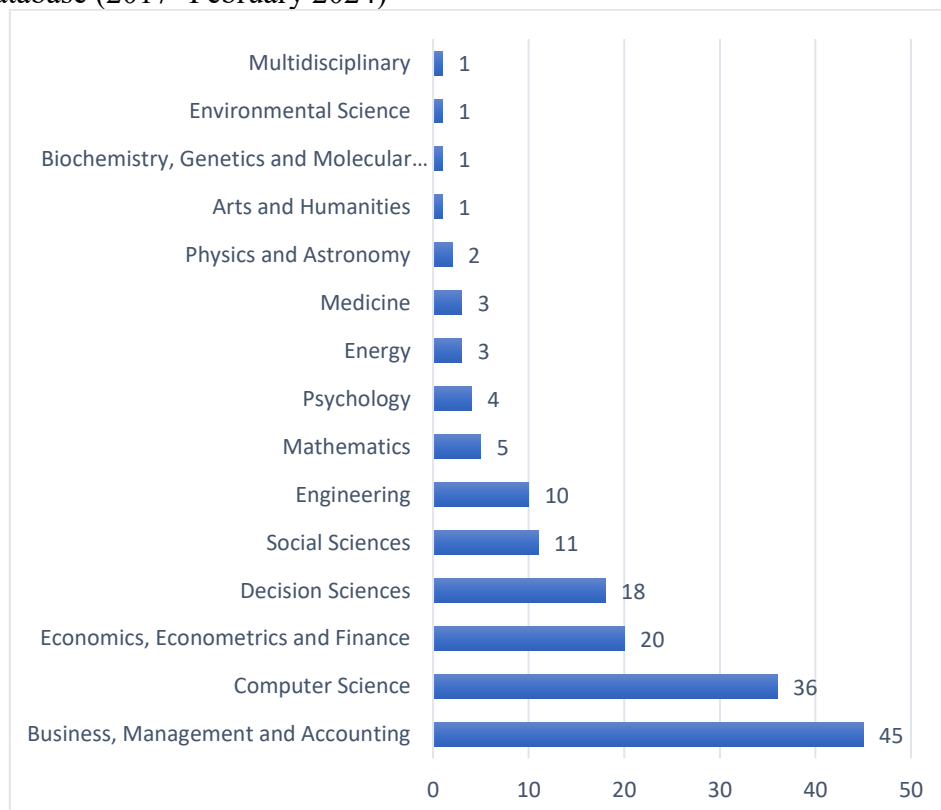
Figure 2. Documents by year investigating Chatbots and Digital Marketing in the WoS database (2017- February 2024)



Source: Authors' work: 2024

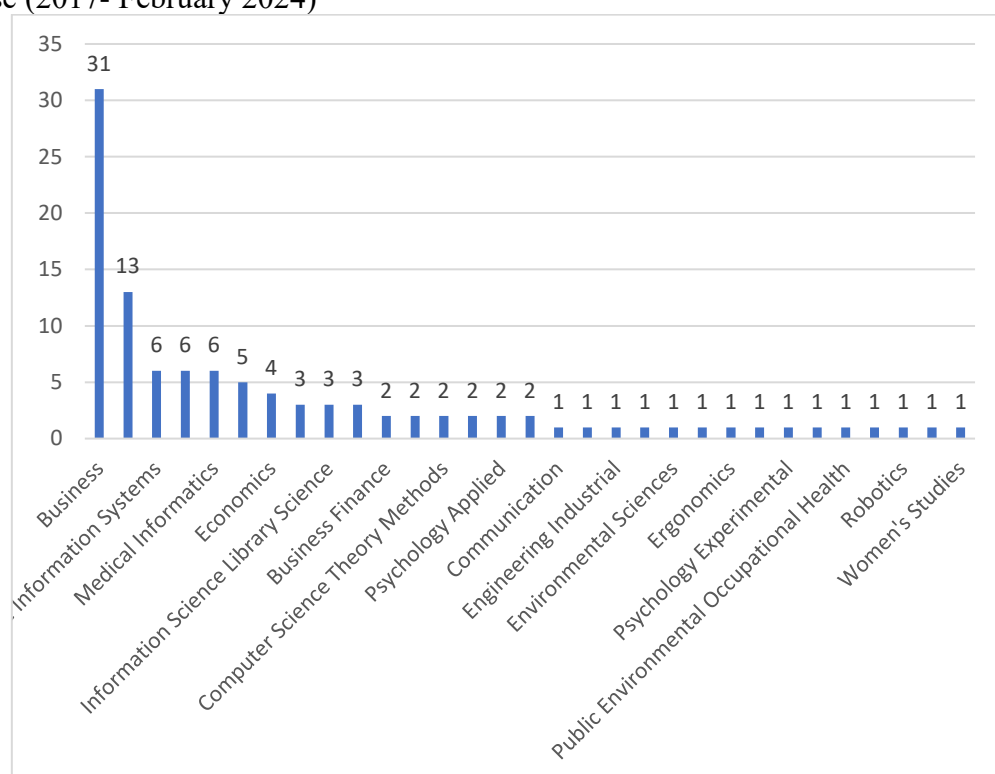
The research topic area/categories presents/present the period from 2017 to February 2024 and include various subject areas (Figure 3., Figure 4.). The number one subject area in Scopus data base is Business, Management and Accounting with 45 findings. In the WoS database top category is Business with 31 findings.

Figure 3. Documents by subject area investigating Chatbots and Digital Marketing in the Scopus database (2017- February 2024)



Source: Authors' work: 2024

Figure 4. Documents by categories investigating Chatbots and Digital Marketing in the WoS database (2017- February 2024)



Source: Authors' work: 2024

According to the data from the initial search, which included all search categories, this subsequent search added a limitation to the field of Business, Management, and Accounting in the Scopus database, reducing the number of documents to 45, out of which 12 have open access. In the WoS database, the results were limited to the areas of Business and Management, where 38 documents were found, out of which 21 have open access. Comparing the documents, there were matches between WoS and Scopus where 8 titles appeared in both databases. This means there are 4 titles in Scopus that do not appear in WoS, and 13 titles in WoS that are not present in Scopus. The total number of documents with open access is 25 (8 matches + 4 in Scopus + 13 in WoS). The third step of the search, which is the main objective of this literature review, aimed to identify documents discussing the advantages and disadvantages of chatbots in digital marketing. This resulted in a smaller number of papers in the Scopus database, and a larger number in the WoS database. Following the initial results in the Scopus database, the addition of keywords "advantages" and "disadvantages" in all search categories yielded one article in the Computer and Social Sciences category, which was not relevant to the research focus of this study. In the WoS database, a search using the keywords "chatbots," "digital marketing," "advantages," and "disadvantages" across all fields resulted in 276 documents. When narrowed down to open access and searched within the Business and Management category, 23 documents were found. Adding the documents from the Scopus database, a total of 27 documents were obtained. Through systematic literature review, it was determined that two documents from the last search in the WoS database were not relevant to this research. For this study, covering the period from 2017 to February 2024, a total of 25 relevant documents from the WoS and Scopus databases were identified.

The table displays the titles of scientific papers found through the specified searches. It includes the database, title of the paper, year of publication, purpose (aim) of the paper, as well as the advantages and disadvantages of chatbots in digital marketing.

Table 1. The table displays database, title of the paper, year of publication, purpose (aim) of the paper, as well as the advantages and disadvantages of chatbots in digital marketing

ID	Author's name, year	The purpose (aim) of the paper	Advantages
	The name of the paper		Disadvantages
Web of Science base			
1	Kaczorowska-Spychalska, D. (2019)	The paper attempts to identify the influence of chatbots on marketing considering their role in Human-to-Machine interaction process.	- customize marketing for brands, boosting consumer engagement, cut support costs, speed up responses, provide personalized advice, enhancing user experience, aid digital transformation, adapting to consumer expectations
	How chatbots influence marketing		- limited knowledge frustrates users, narrow human-like skills, job replacement fears impact acceptance, ethical concerns in modelling consumer cognition
2	Mehta, R., Singh, H., Banerjee, A., Bozhuk, S., Kozlova, N. (2020)	The study presents the current trends of on-line purchasing and the key factors that affect the decision-making process.	- enhancing customer loyalty, facilitating payments, delivery, and online shopping support, personalizing the shopping experience, optimizing touchpoints for product and service promotion
	Comparative analysis of the consequences of changing purchasing models in the global digitalised economy		- consumers perceive chatbots and voice assistants as inferior to human interaction, despite younger individuals' trust in technology, there remains a need for human-like personalization, customer adaptation, and empathy
3	Hildebrand, C., Bergner, A. (2021)	The article explores the impact of Conversational Robo Advisors on trust, firm perception, and	- increased trust, positive perception, investor acceptance, engaged experience (users enjoy robot interactions)
	Conversational robo advisors as surrogates of trust: onboarding experience, firm		NO

	perception, and consumer financial decision-making	financial decision-making.	
4	Hnoievyi, V. H., & Koren, O. M. (2021)	The article deals with the current trends in communication aspects of company's relations with the customers.	- facilitate efficient communication, enhance customer satisfaction, automate processes, and personalize services
	Modern digital marketing trends and their influence on the marketing strategy formation		- may encounter communication limitations, require personalized adaptation, face integration complexity, and demand ongoing maintenance and updates
5	Abdulquadri, A., Mogaji, E., Kieu, T. A., Nguyen, N. P. (2021)	This study investigates how chatbots can aid financial inclusion in emerging markets by enhancing human capital, removing barriers to financial services, and promoting digital inclusion for economic stability.	- enhance user experience by offering round-the-clock banking services, promoting financial inclusion, ensuring efficient responses to user queries, and potentially expanding multilingual support
	Digital transformation in financial services provision: a Nigerian perspective to the adoption of chatbot		- demonstrate shortcomings in accountability, language diversity, security verification, and responsiveness to spontaneous queries
6	Crolic, C., Thomaz, F., Hadi, R., Stephen, A. T. (2021)	This research contributes to the nascent literature on chatbots in customer service and has managerial implications both for how chatbots should be designed and for context-related deployment considerations.	- efficiency, anthropomorphism, emotion management, and user expectation adjustment, highlighting the importance of careful design and emotional context consideration
	Blame the Bot: Anthropomorphism and Anger in Customer-Chatbot Interactions		- negative impact on angry users due to anthropomorphism, expectation violation, and potential influence on overall company perception, emphasizing the importance of careful design and emotional context consideration
7	Dawar, S., Panwar, S., Dhaka, S., Kudal, P. (2022)	This paper aims to understand the role of user experience,	- efficiency, availability, cost-effectiveness, standardization, streamlining communication

		performance expectancy, effort expectancy, and trust in customer chatbot use intentions from an Indian point of view.	processes and enhancing user experience
	Antecedents and role of trust in chatbot use intentions: an Indian perspective		- include algorithm reliability, user trust issues, process standardization challenges, and negative user experience impacting adoption intention
8	Jansom, A., Srisangkhajorn, T., Limarunothai, W. (2022)	This study examines how marketing strategies of chatbot e-service agents impact perceived communication credibility and satisfaction in apparel retailing of Thai customers.	- include 24/7 interaction, efficient issue resolution, provision of information on the latest trends, and enhanced communication credibility and customer satisfaction
	How chatbot e-services motivate communication credibility and lead to customer satisfaction: the perspective of Thai consumers in the apparel retailing context		- include the limited impact of interactive chatbots on communication credibility, the ineffectiveness of entertainment elements in enhancing customer satisfaction, and the potential unmet needs of Thai consumers in clothing retail, particularly regarding interaction and entertainment
9	Balan, C. (2023)	The aim of this review is to analyse high-quality business research literature on chatbots and voice assistants using the TCCM framework, and to outline a research agenda for future studies.	- include enhanced customer interaction, streamlined e-commerce processes, future growth predictions, and augmented customer support capabilities through AI
	Chatbots and Voice Assistants: Digital Transformers of the Company-Customer Interface-A Systematic Review of the Business Research Literature		- emotional exchange limitations, anthropomorphism challenges, interaction complexity, and privacy/security concerns highlight areas for further development and improvement in chatbot research and application
10	Haupt, M., Rozumowski, A., Freidank, J., Haas, A. (2023).	This study offers valuable insights for chatbot technology	NO

	Seeking empathy or suggesting a solution? Effects of chatbot messages on service failure recovery	developers and marketers aiming to enhance both efficiently and cost-effectively the customer experience with digital conversational agents.	- include inadequate responses, user dissatisfaction upon failure messages, limited functionality in processing natural language, and the necessity for recovery strategies to mitigate negative user reactions and financial losses
11	Castelo, N., Boegershausen, J., Hildebrand, C., Henkel, A. P. (2023)	The article discusses the consumer perception of service bots and the firms that implement them.	- encompass cost reduction, profit increase, enhanced user experience, and potential sharing of savings, all contributing to improved service ratings and serving as motivation for their implementation in industries
	Understanding and Improving Consumer Reactions to Service Bots		- perceived corporate motivation results in decreased customer satisfaction, reluctance to recommend the company, and the potential for negative effects to be mitigated or reversed through shared economic benefits or superior chatbot service
12	Ltifi, M. (2023).	The article investigates the hedonic aspects of consumer trust in text chatbots.	- include their ability to enhance consumer trust through empathy and friendliness, ease of use, clear bot identity disclosure, and capability to manage complex tasks, collectively providing users with a positive experience and trust
	Trust in the chatbot: a semi-human relationship		- less dependable due to the perceived lack of empathy and personal connection, especially with complex tasks, identity disclosure and AI limitations further compound these issues
13	Schindler, D., Maiberger, T., Koschate-Fischer, N., Hoyer, W. D. (2023).	The study investigates how the mode of communication (speaking vs. writing) with	- offer users a choice between speech and text communication, impacting decision-making and satisfaction, particularly when aligned with product types, thus enhancing brand competitiveness.

	How speaking versus writing to conversational agents shapes consumers' choice and choice satisfaction	conversational agents (such as chatbots or digital assistants) influences consumers' decision-making processes and satisfaction.	NO
Web of Science and Scopus base			
14	Jenneboer, L., Herrando, C., Constantinides, E. (2022).	The purpose of this study was to investigate the influence of chatbots on customer loyalty.	- encompass system reliability and availability 24/7, prompt responses with empathy, provision of accurate information, increased user satisfaction, trust, and loyalty
	The Impact of Chatbots on Customer Loyalty: A Systematic Literature Review		- privacy concerns, potential inaccuracies in information, reduced visibility of user complaints, and balancing service personalization with user privacy pose significant drawbacks of chatbots
15	Magno, F., Dossena, G. (2022)	This paper aims to explore whether customers' perceptions of the hedonic and utilitarian attributes of chatbots can impact their satisfaction, and subsequently, their relationships with brands.	- customer satisfaction enhancement (perception of hedonic and utilitarian attributes), brand relationship strengthening, information quality, and emotional experience
	The effects of chatbots' attributes on customer relationships with brands: PLS-SEM and importance-performance map analysis		- poor information quality, inadequate chatbot experience, bellow standard system quality can hinder user satisfaction and brand relationships
16	Lappeman, J., Marlie, S., Johnson, T., Poggenpoel, S. (2022)	The study explores consumer willingness to disclose personal information to banking chatbots.	- enhanced customer service, improved efficiency, personalized interactions, a competitive edge
	Trust and digital privacy: willingness to disclose personal		- data privacy concerns, reduced brand trust, the need to establish cognitive and emotional trust

	information to banking chatbot services		
17	Wei, RQ (Wei, Ruiqi); Vize, R (Vize, Roisin); Geiger, S (Geiger, Susi), (2022).	This study examines how boundary spanners and boundary interfaces interact to coordinate solution networks in digital platforms.	- automation, efficiency, customer support, and scalability
	Boundary resource interactions in solution networks		- interface limitations, reliance on human intermediaries, complexity in task handling, user constraints
18	Dwivedi, Y.K., Balakrishnan, J., Baabdullah, A.M., Das, R. (2023)	This paper explores how cognitive and peripheral cues affect the chatbot experience, mediated by perceptions of humanness.	- enhanced customer engagement, increased efficiency, personalized interactions, and improved brand perception
	Do chatbots establish "humanness" in the customer purchase journey? An investigation through explanatory sequential design		- include inadequate understanding of user requests, limited ability to address complex issues, lack of emotional intelligence, and potential privacy concerns for user data
19	Li, C-Y.; Fang, Y-H.; Chiang, Y-H. (2023)	This study provides empirical insights into the continued use of chatbot services from the perspective of chatbot affordance.	- enhanced customer service, improved efficiency, personalized interactions, and a competitive edge
	Can AI chatbots help retain customers? An integrative perspective using affordance theory and service-domain logic		- include limitations in deep personalization, the potential to create barriers to service switching, challenges in fostering dedicated customer relationships, and constraints in delivering value through user interaction and engagement
20	Pizzi, G., Vannucci, V., Mazzoli, V., Donvito, R. (2023)	The article investigates the interplay between two common features of the customer service	- include increased efficiency in handling customer inquiries, 24/7 availability, personalized interactions, and scalability to manage a large volume of user interactions

	I, chatbot! the impact of anthropomorphism and gaze direction on willingness to disclose personal information and behavioural intentions	chatbot experience: gaze direction and anthropomorphism .	- include the potential to evoke scepticism among users, limited perception of warmth and competence, the influence of users' high levels of Theory of Mind, and inadequate chatbot design
21	Lee, KW (Lee, Kuo-Wei); Li, CY (Li, Chia-Ying), 2023.	The study investigates how chatbot affordances impact consumer behaviour.	- provide users with anytime, anywhere connectivity, facilitate information association, enhance visibility, and encourage interactivity
	It is not merely a chat: Transforming chatbot affordances into dual identification and loyalty		NO
Scopus base			
22	Gentsch, P. (2018).	The book provides valuable insights for business professionals who want to harness the power of artificial intelligence (AI) and algorithmics in their organizations.	- include communication automation, personalized responses, 24/7 availability, enhanced user experience, and scalability
	AI in Marketing, Sales and Service: How Marketers without a Data Science Degree can use AI, Big Data and Bots		- communication challenges, limited intelligence, potential errors, security concerns
23	Boiko, M., Bosovska, M., Vedmid, N., Melnychenko, S., Stopchenko, Y. (2022).	The article explores the impact of global digitalization on the tourism industry in Ukraine.	- increased efficiency, personalized communication, scalability of operations, and innovative approach
	Digitalization: Implementation in the tourism business of Ukraine		NO
24	Araújo, C., Gonçalves, R., Lopes da Costa, R., Dias, A., Pereira, L. (2022).	The article explores how AI impacts the fashion industry's	- personalized services, quick responses to user inquiries, continuous 24/7 support, and increased conversion rates

	Artificial intelligence in the digital customer journey	digital customer journey, focusing on consumer interactions with recommendation systems, chatbots, and virtual testers during online shopping.	- including issues with trust, personal interaction, complexity of queries, and privacy concerns
25	Nyagadza, B., Muposhi, A., Mazuruse, G., Makoni, T., Chuchu, T., Maziriri, E.T., Chare, A. (2022).	The article aims to explore factors driving customer willingness to use chatbots in Zimbabwe for e-banking customer service, an under-researched area.	- enhanced efficiency, improved user experience, fostering engagement, and technological innovation
	Prognosticating anthropomorphic chatbots' usage intention as an e-banking customer service gateway: cogitations from Zimbabwe		- including security vulnerabilities, lack of human-like qualities, automation concerns leading to job displacement fears, and privacy issues, may undermine user trust and adoption for e-banking services

Most of the papers examined presented theoretical frameworks or empirical research on the topic. The findings from the literature review indicate that contemporary digital technologies, including chatbots, have significant potential to revolutionize numerous facets of customer service and marketing practices. These technologies offer opportunities for businesses to enhance customer engagement, improve service efficiency, and personalize user experiences. However, despite the promising potential, several challenges and limitations were identified in the literature. These include concerns regarding chatbots' limited knowledge and capabilities, as well as issues related to privacy, security, and user trust.

Chatbots bring numerous advantages to modern business operations. They enable customized marketing for brands, foster consumer engagement, reduce support costs, and expedite responses. They also assist in digital transformation by adapting to consumer expectations, enhancing customer loyalty, and facilitating payments, delivery, and online shopping support. Through increased trust, positive perception, and engaging user experiences, chatbots improve communication, enhance customer satisfaction, automate processes, and personalize services. Simultaneously, by adjusting user expectations through efficiency, anthropomorphism, and emotion management, chatbots optimize communication processes and improve user experience. Additionally, by providing personalized services, quick responses to user inquiries, continuous 24/7 support, and increased conversion rates, chatbots enhance efficiency, improve user experience, foster engagement, and encourage technological innovation.

In digital marketing, chatbots offer numerous benefits but also present several disadvantages that can affect their effectiveness. Users often experience frustration due to chatbots' limited

knowledge and narrow human-like skills. Moreover, concerns about job replacement and ethical considerations in modelling consumer behaviour can impact users' acceptance of chatbots. Despite advancements in technology, consumers still perceive chatbots as inferior to human interaction, highlighting the need for more human-like personalization, empathy, and adaptation. Communication limitations, integration complexity, and the need for ongoing maintenance and updates can hinder chatbots' performance in digital marketing campaigns. Additionally, chatbots may struggle with accountability, language diversity, and responsiveness to spontaneous queries, leading to user dissatisfaction. Negative experiences, such as anger resulting from anthropomorphism and violated expectations, can damage overall company perception, emphasizing the importance of careful design and emotional context consideration. Furthermore, issues such as algorithm reliability, user trust, and standardization challenges can impact users' adoption intention of chatbots. Emotional exchange limitations, privacy concerns, and security vulnerabilities also highlight areas for improvement in chatbot development and implementation. Inadequate responses and user dissatisfaction upon failure messages can lead to negative brand relationships and financial losses. Moreover, perceived corporate motivations and privacy concerns may decrease customer satisfaction and trust in chatbot services. Poor information quality and interface limitations can further hinder user satisfaction and brand relationships. Balancing service personalization with user privacy remains a significant challenge, along with the reliance on human intermediaries and complexity in task handling. Lastly, security vulnerabilities, lack of human-like qualities, and concerns about job displacement and privacy issues may undermine user trust and adoption of chatbots. These disadvantages underscore the importance of addressing limitations and enhancing the capabilities of chatbots to improve their effectiveness in digital marketing.

4. DISCUSSION

The systematic literature review conducted in this study provides a comprehensive overview of the advantages and disadvantages of chatbots in digital marketing. The findings reveal several key insights into how chatbots are perceived and utilized in various sectors such as digital marketing, e-commerce, customer relationship management, retail, financial services, tourism, healthcare and medical services, the fashion industry, communication and media, and general business and management. The research indicates substantial scientific observation of chatbot usage in digital marketing, with a considerable number of studies conducted between 2017 and 2024.

4.1. EXTENT OF SCIENTIFIC OBSERVATIONS

Regarding the first question, the systematic review identified 151 documents related to chatbots and digital marketing, with 45 documents in the Scopus database and 38 in the WoS database focusing on Business, Management, and Accounting. The analysis of the literature shows that existing studies provide a balanced view of both the advantages and disadvantages of chatbot usage. This extensive body of research underscores the growing interest in chatbots and their relevance in the marketing domain.

4.2 BALANCE OF ADVANTAGES AND DISADVANTAGES

Out of the 25 documents reviewed, 24 mention the advantages of chatbots, while 21 documents list their disadvantages. This indicates that researchers are keenly aware of both the potential benefits and the challenges associated with chatbot technology, thus confirming the answer to the second research question.

4.3 KEY ADVANTAGES AND DISADVANTAGES

The key advantages that have a direct impact on marketing communication and the use of chatbots in marketing are enhancing personalized communication, increasing user engagement, and loyalty. They allow for tailored interactions that meet individual user's needs, which is crucial for building strong customer relations. The 24/7 availability of chatbots ensures users receive immediate responses and support at any time, which significantly improves user experience and satisfaction. By automating customer support functions, chatbots help companies reduce operational costs. This efficiency allows businesses to allocate resources more effectively. Chatbots facilitate the collection of valuable data on user preferences and behaviour, which can be used to inform and improve marketing strategies and decision-making processes.

The most frequently mentioned disadvantages with chatbots are limited knowledge and capabilities to understand and respond to complex queries. This limitation can lead to user frustration and dissatisfaction. The lack of emotional intelligence and empathy in chatbots can negatively impact the user experience. Users may prefer human interaction for more nuanced and emotionally charged conversations. There are significant concerns regarding the privacy and security of the data collected by chatbots. Ensuring data protection and user privacy is a critical issue that needs to be addressed to maintain user trust. Integrating chatbots into existing systems can be technically challenging. It requires ongoing maintenance, updates, and sometimes significant changes to existing workflows.

The advantages and disadvantages of chatbots have a direct impact on marketing communication strategies. The ability to provide personalized and immediate communication can enhance user engagement and satisfaction, leading to stronger customer relationships and increased loyalty. However, the challenges related to chatbot capabilities, emotional intelligence, and data security must be carefully managed to prevent negative user experiences and maintain trust. Future research should focus on improving the capabilities of chatbots, particularly in understanding and processing complex queries. Enhancing the emotional intelligence of chatbots could also result in making interactions more satisfying for users. Additionally, addressing privacy and security concerns is crucial to ensure the feeling of safety when users share their information with chatbots. Further exploration into user perceptions and expectations of chatbots can provide valuable insights for developing more effective and user-friendly chatbot systems. While chatbots offer significant potential benefits for digital marketing, there are also considerable challenges that need to be addressed. By understanding and mitigating these disadvantages, businesses can better leverage chatbot technology to achieve their marketing goals and improve customer satisfaction.

5. CONCLUSION

Chatbots offer numerous advantages in digital marketing, including customized marketing, enhanced consumer engagement, reduced costs, and expedited responses. They contribute to digital transformation, build customer loyalty, and improve overall user experience. However, several disadvantages exist, such as limited knowledge, user frustration, and concerns about job replacement and privacy. These drawbacks (disadvantages) underscore the need for further research and development which would address limitations and enhance chatbots' effectiveness in digital marketing. For further research in this area, more efforts should be focused on improving chatbots' capabilities, addressing security vulnerabilities, and balancing personalization with user privacy concerns. Additionally, some other valuable areas for future research would be exploring users' perceptions and expectations of chatbots as well as investigating strategies to enhance trust and user satisfaction.

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