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Impact of artificial intelligence on the personalization of the customer experience: A systematic literature review

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Abstract Artificial intelligence (AI) has emerged as a revolutionary and transformative force across multiple spheres of life, notably reshaping industries with marketing as a prime beneficiary, enabling it to multiply sources of information and data, improve software data management capabilities, and design complex and advanced algorithms. The integration of artificial intelligence into marketing strategies is radically transforming the way companies engage with their customers. By personalizing the customer experience, AI makes it possible to offer more tailored and responsive services, with a positive impact on customer satisfaction and loyalty. Moreover, AI has demonstrated its ability to enhance decision-making processes, optimize resource allocation, and create new opportunities for competitive advantage within dynamic market environments. Our systematic literature review, based on the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) methodology, analyzed 195 potentially relevant articles on the subject from four databases (Scopus, Science Direct, springer and web of Science). After applying the inclusion and exclusion criteria, 24 articles were selected for detailed analysis. The primary findings of this review indicate that the application of artificial intelligence to personalize the customer experience leads to significant improvements in terms of customer satisfaction and operational efficiency. Nevertheless, personalization, as a significant notion, remains relatively unexplored in artificial intelligence research and practice. AI technologies such as deep learning, predictive analytics and interactive chatbots were frequently cited as catalysts for better understanding and anticipating customer needs. However, the studies also highlight significant challenges, particularly in terms of data security, ethical considerations, transparency issues and maintaining human engagement in customer interactions. Implications for research and directions for future research in the field of marketing and artificial intelligence were suggested.

Keywords: personalized marketing, customer journey, human-ai interaction, prisma

1. Introduction

The advent of artificial intelligence (AI) is profoundly reshaped the landscape of interactions between businesses and their customers. At the heart of this transformation lies the personalization of the customer experience, an area in which AI is playing an increasingly prominent role.

The adoption of AI by customers in their interactions with businesses has increased dramatically in recent years. Indeed, a 2020 study by the Capgemini Research Institute revealed that 54% of customers used_AI in their interactions with businesses, a significant increase of 21% observed in 2017 (Thieullent et al., 2020). This trend is driven by technological advances that make AI more accessible and powerful, as well as by customers' growing expectations for personalized, customer-centric experiences.

AI enables businesses to collect and analyze customer data on an unprecedented scale. These data, from a range of sources, such as online purchases, loyalty programs, and social media interactions, provide valuable insight into customer preferences, behaviors, and needs (Parkes, 2018). By leveraging these data with machine learning algorithms, businesses can create personalized and highly targeted customer experiences.

AI-based personalization of the customer experience offers many benefits to businesses. It improves customer satisfaction (Braun et al., 2017), increases loyalty (Sikandar et al., 2019), increases sales (Parkes, 2018), and enhances competitiveness. Indeed, customers are more likely to appreciate and remain loyal to companies that offer them personalized and relevant experiences.

However, personalizing the customer experience based on the basis of AI also raises challenges. It is crucial to ensure that customers' privacy is respected and that they are transparently informed regarding the collection and utilization of their data (Sikandar et al., 2019). In addition, it is important to ensure that AI algorithms are biased and do not discriminate against certain groups of customers (Theobald et al., 2020).Despite these challenges, AI offers immense opportunities to personalize

the customer experience and create longer-lasting relationships with customers. Companies that embrace AI responsibly and ethically are well positioned to thrive in today's digital economy (Thomas et al., 2022).

In essence, the integration of artificial intelligence (AI) in the field of customer experience is part of two major research streams: information systems (ISs) and marketing. Despite the growing interest in AI and its potential impact on personalizing the customer experience, in-depth scientific research in this area remains relatively limited. This systematic literature review, conducted following the PRISMA methodology, has two main objectives:

- This paper presents a comprehensive overview of the available literature on the role of artificial intelligence (AI) in transforming the customer experience through personalization, paving the way for more relevant, engaging, and personalized interactions.
- Draw up a roadmap for future research should be drawn.

2. Research Questions

The aim of this systematic literature review is to provide answers to the research questions listed below:

Q1: What is the current state of research into artificial intelligence for customer experience? How has the literature on this subject evolved over time?
Q2: What are the contributions of these studies?
Q3: What are the gaps and limitations of previous literature, and what opportunities for future research can be derived to enhance the use of artificial intelligence in the personalization of the customer experience?

3. Research Design

This paper is a systematic literature review, a methodology that identifies, evaluates, and interprets all available research in relation to a particular certain issue, subject, or phenomena of interest (Kitchenham & Charters, 2007). Systematic literature reviews produce robust summaries of the most credible evidence (Petticrew & Roberts, 2008). To carry out this analysis, we follow the PRISMA methodology.

3.1. Search strategy

There are three key components that form the core of our search strategy: definition of search terms, selection of relevant databases and carrying out the searches on these chosen databases.

3.1.1. Definition of keywords

The initial search string included keywords such as ‘artificial intelligence’, ‘personalization’, ‘customer experience’ and ‘marketing’. The abbreviation ‘AI’ for artificial intelligence was used with the Boolean operator ‘OR’ to obtain the set of articles that included at least one of the synonyms. The Boolean operator ‘AND’ was used to obtain all the articles dealing with artificial intelligence, personalization and customer experience. Moreover, wildcards ‘*’ and inverted commas (*) were used to obtain more exhaustive search results, as detailed in Table 1.

Table 1 Search chain.

Database	Search chain
Scopus	TITLE-ABS-KEY (AI OR "artificial intelligence") AND ("customer experience") AND (marketing) AND (personalization)
Springer	(AI OR "artificial intelligence") AND ("customer experience") AND (marketing) AND (personalization)
Web of science	TS=(AI OR "artificial intelligence") AND ("customer experience") AND (marketing) AND (personalization)
Science direct	(AI OR "artificial intelligence") AND ("customer experience") AND (marketing) AND (personalization)

3.1.2. Selection of databases

To carry out our literature review, we chose to explore four databases known for their wealth of scientific publications: Scopus, Web of Science (WoS), Springer and Science Direct. These databases were selected because of their broad coverage across many different fields such as humanities, life sciences, business management, social sciences and psychology as well as health (Kaur et al., 2021). Moreover, these databases are recognized for their quality, relevance, and reliability in the field of scientific research. When we searched these databases, many articles were found, as illustrated in Table 2.

3.1.3. Search process

In this preliminary phase, a syntax search was conducted in the chosen databases (Scopus, Science Direct, springer and web of Science). The search focused on articles and literature reviews. To order to guarantee the relevance of the results, the search was restricted to articles published in English and French that are open-access, with a time limit eliminating all articles published before 2019 and a selection by discipline or subdiscipline, as well as a choice of keywords. For an exhaustive search,

Boolean operators (AND, OR) and approximate expressions (wildcards, braces, inverted commas) were used (Collins et al., 2021).

We conducted our search by using and entering all five of our keywords-artificial intelligence, personalization, customer experience, marketing, and AI-in the same way as the search bar for all the databases. We then exported the results in Zis format to the bibliographic reference management software ZOTERO, creating a unique sub-collection for each database. Once the articles had been imported into ZOTERO, we exported them to Excel in CSV format.

Table 2 Number of articles per database.

	Total of articles
Scopus	3
Science Direct	161
Springer	29
Web of Science	2
	195

Source: SCOPUS, Springer, Science direct and Web of Science databases.

Once the data hare been collected, it is essential to avoid the repetition of the same references several times in the databases, by deleting duplicates. The procedure for this operation, which is generally carried out via Excel software, is simple. First, the four databases are grouped in a single Excel spreadsheet. The integrated "delete duplicates" function automatically identifies and deletes identical records. All the selected items were been compiled in a spreadsheet entitled "Complete database without duplicates", which formed form the starting point and basis for the next and first selection stages according to the inclusion and exclusion criteria.

3.2. Definition of selection criteria

To ensure that our review is grounded in high-quality evidence, we establish rigorous inclusion and exclusion criteria, that align with the review's scope (Tranfield et al., 2003). The review process is limited to articles that fulfill all the requirements outlined above.

3.2.1. Inclusion criteria

The selection of articles for the review was conducted according to the following criteria:

- Articles that include our keywords "artificial intelligence," "personalization," "customer experience," and "marketing."
- Articles and literature reviews.
- Articles written in English or French.
- Articles published after 2019.
- Open-access articles.
- Articles published in the academic fields of business, management, and accounting.
- Articles that address the impact of artificial intelligence on the personalization of customer experience.
- Articles that discuss artificial intelligence in the context of customer-focused marketing.

3.2.2. Exclusion criteria

Additionally, we exclude the following criteria to ensure a more representative research body besides the inclusion criteria previously outlined:

- Articles published before 2019
- Articles that do not directly address our topic (off-topic)
- Articles published in a language other than English or French
- Duplicate articles
- Other other types of documents, in addition to journal articles and literature reviews, include book chapters, books, position papers, workshop articles, theses, group discussions, posters, editorials, etc.

3.3. Article selection strategy

After an exhaustive exploration of the selected databases, the initial search identified an initial corpus of 195 articles. To optimize the relevance of the results, a four-step linear filtering process was implemented. The first step was to check for redundancy by eliminating potential duplicates within the initial corpus (deduplication). Next, the relevance of each article's title and keywords to the research theme was assessed. Articles whose titles and keywords did not reflect an adequate alignment with the research objectives were excluded. The third step involved a meticulous analysis of the abstract of each remaining article to assess its relevance to the research problem. Articles whose abstracts did not present informative and

pertinent content relevant to the current research were removed from the analysis. Finally, the last step involved a thorough assessment of the full-text quality in relation to the research problem of the current study. Only those articles whose content proved relevant and informative for the ongoing research were retained. The process of article selection, along with the total number of articles eliminated and retained at every step, is illustrated in Figure 1.

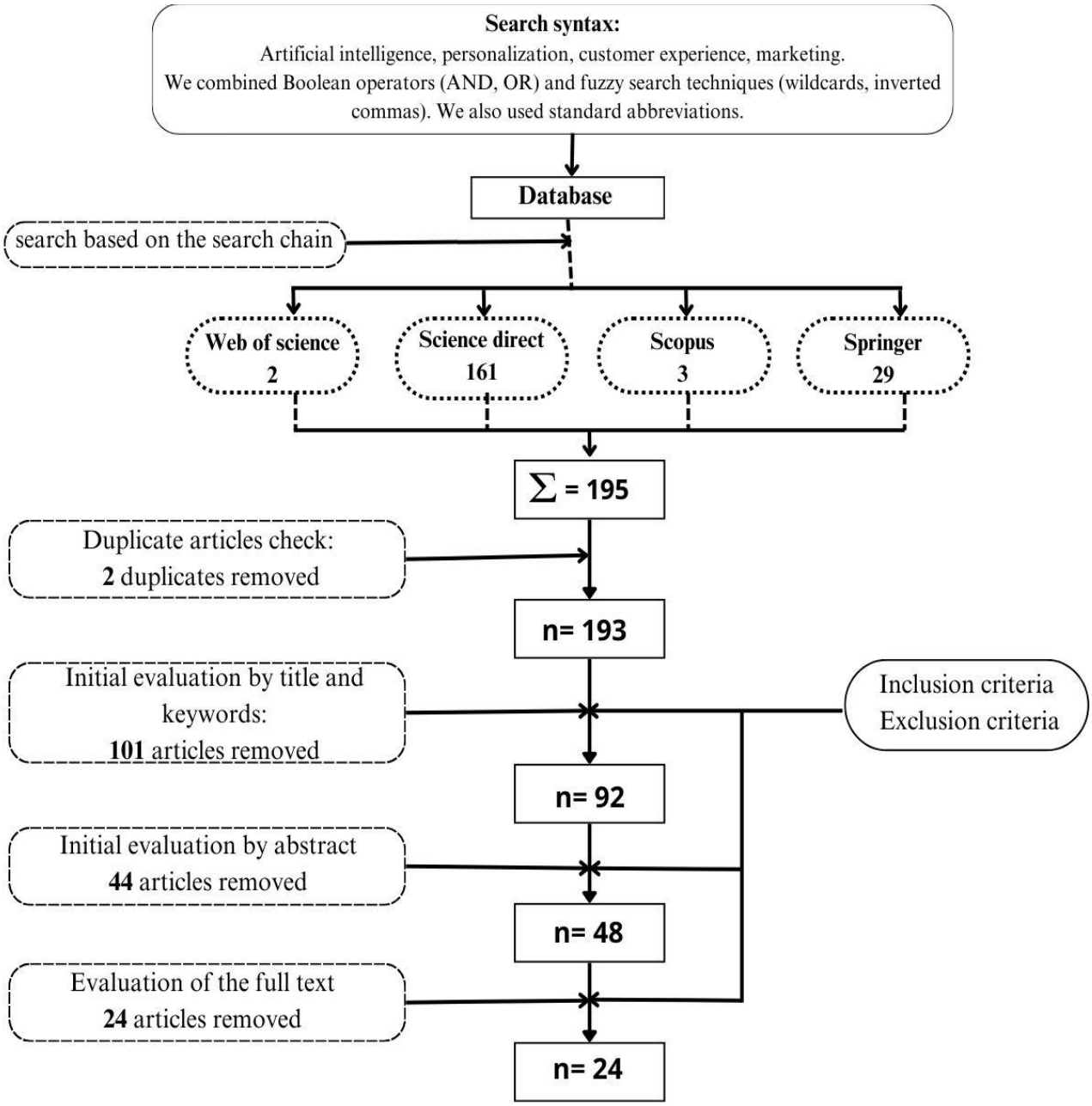

Figure 1 Article selection process. *Source:* SCOPUS, Springer, Science direct and Web of Science databases.

The first step taken was to eliminate duplicates by examining unique digital identifiers (DOIs) wherever possible, and then comparing article titles and authors. This procedure eliminated 2 duplicates, reducing the total number of articles to 193. Next, a preliminary examination was conducted by reading the titles and keywords of the articles. During this filtering process, the studies were classified into three categories: to be retained, to be removed and to be investigated. A total of 101 articles were excluded, leaving 92 for further analysis of the abstracts, including 6 suspect articles. The articles retained during the initial screening underwent a more in-depth analysis by reading the abstracts. The aim of this step was to identify articles relevant to the research and exclude those that did not meet the defined criteria. During this filtering process, 44 articles were removed, leaving 48 articles for the final phase of screening. This final step aimed to definitively determine whether these articles met the research criteria and deserve to be included in our final sample. The inclusion decision for each article was made after a thorough reading of the full text. At the end of this selection and enrichment process, 24 articles were removed, leaving 24 articles distributed as follows: 1 article from Web of Science, 18 articles from ScienceDirect, 3 articles from Springer,

and 2 articles from Scopus, as illustrated in Figure 2. These articles will constitute the final sample for our systematic literature review.

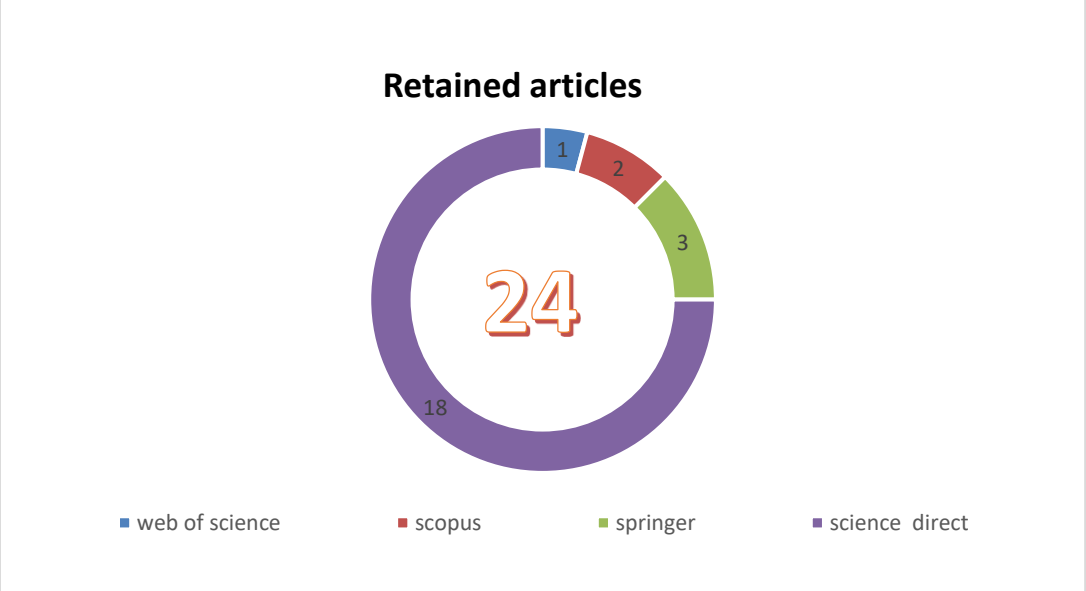

Figure 2 Number of articles retained by the database. *Source:* SCOPUS, Springer, Science direct and Web of Science databases.

4. Results and Discussion

4.1. Data extraction

The data extraction phase in a literature review is of significant importance in the overall process, as it involves the crucial task of determining and extracting relevant data from each of the carefully chosen aticles, with the ultimate goal of addressing the specific research questions posed by the researchers (Zahedi et al., 2016). In order to identify and extract relevant information related to the research questions from the 24 selected primary articles, a rigorous data extraction methodology was implemented. This methodology, consisting of several key stages, ensures that the data can subsequently be used at higher levels of interpretation, enabling in-depth analysis and a clearer understanding of the research results.

As a first step, an Excel spreadsheet was developed to provide a structured framework for collecting the ideas, methods, contributions and key findings from each of the 24 primary studies. The use of this structured extraction table aims to ensure the consistency and accuracy of the extraction process, by guaranteeing systematic and rigorous documentation of the relevant information. Furthermore, this extraction methodology makes it easier to evaluate the data at a deeper level of analysis in the future, making it possible to clearly identify patterns and emerging trends in the studies that were analyzed.

The following information was then extracted from each scientific article included in the analysis: year of publication, authors, title, journal of publication, methodology, research sample, theory used, main results, future prospects and number of citations. A description of each item is given in Table 3 below.

4.2. Synthesis and discussion of results

4.2.1. Q1: What is the current state of research on artificial intelligence in the context of customer experience? How has the literature on this subject evolved over time?

The current state of research on artificial intelligence applied to personalizing the customer experience shows significant progress over time, with a variety of research methodologies being used. Articles published in leading journals testify to academic expertise and the growing importance of the subject. The mapping of links between keywords highlights recurring and emerging topics, highlighting the importance of artificial intelligence in marketing.

4.2.1.1. Chronological view

As mentioned in Section III, the period selected for this systematic review runs from 2019 to 2024. The distribution of publications over these years is shown in Figure 3.

Figure 3 shows a gradual increase in publications on artificial intelligence for personalized customer experience from 2023 to 2024. The year 2023 featured a high number of publications, with six articles. The year 2024 was also very prolific in terms of publications, with seven articles in the first third of the year alone. This indicates a much greater interest in this field in recent years.

On the other hand, the years 2019 and 2020 pesented a low number of publications with three publications each year, whereas the years 2021 and 2022 presented a minor increase in the number of publications, with four articles each year. This division highlights the increasing number of studies and articles on the impact of artificial intelligence on the personalization of the customer experience over time.

Table 3 Data extraction.

Extracted data	Description
Year of publication	The evaluation of the advancements in the field of study is predicated on the year the study was published.
Title of the study	The title of the study gives a brief description of the subject and the research objectives of the researchers.
Authors of the study	The identification of the authors facilitates the recognition of the proficiency and input of the researchers who conducted the study.
Publication journal	The publication journal provides information about the reputation and rigor of the scientific journal in which the study was published.
Methodology used	By describing the methodology used in detail, we can examine the soundness and validity of the research carried out.
Details of the sample studied	A description of the sample studied provides an understanding of the characteristics of the target population and the generalizability of the study results.
Search results	The study is based on research results which provide the data and conclusions obtained by the authors.
Perspectives for future research	Future research horizons identify areas of research that are in full expansion and questions that require further research.
Research theory	The study can be placed into a larger conceptual framework by defining the underlying research theory, which aids in understanding the assumptions and theoretical underpinnings that guided the research.
Number of citations	The number of citations a study receives reflects its impact and influence in the research field.

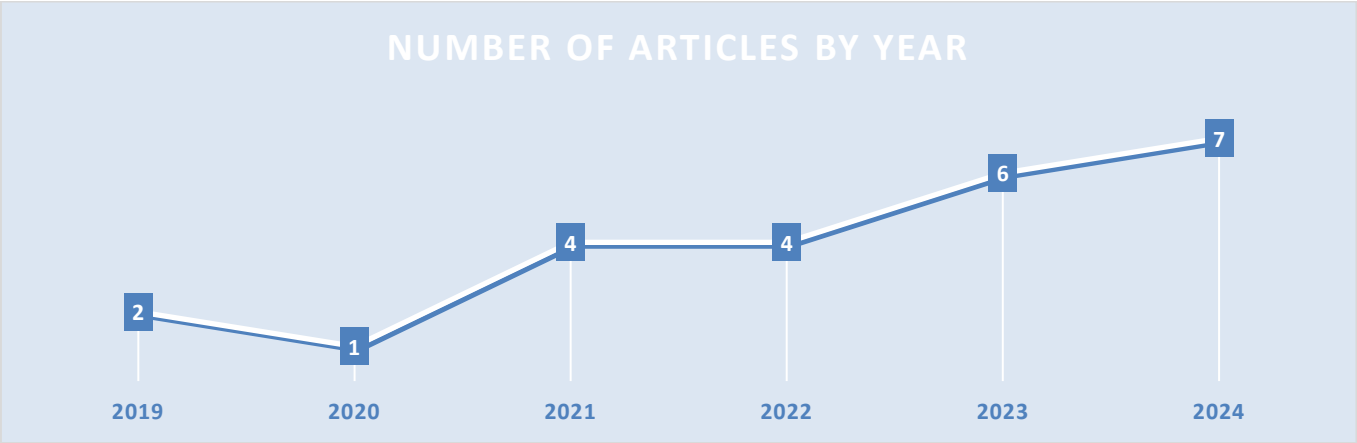

Figure 3 Number of articles by year. *Source:* SCOPUS, Springer, Science direct and Web of Science databases.

4.2.1.2. Research methodologies

Figure 4 shows the distribution of research methodologies used in the primary studies included in this systematic review. There is a clear predominance of literature review studies, which were used by 46% of the articles. The figure also shows the presence of qualitative studies (2 studies) and quantitative studies (8 studies), accounting for 33% of the studies. The majority of these quantitative studies employ the least squares method (PLS) and questionnaire-based surveys. Importantly, a large proportion of the articles (13%) combine qualitative and quantitative approaches, meaning they employ a mixed methodology of research.

Most of the studies and surveys analyzed in this literature review were conducted and administered online. Some of them involved representative samples of the target population. For example, Ameen et al., (2021) administered a questionnaire to 434 participants selected on specific criteria, such as age and use of an AI service offered by a brand. The objective of this study was to examine the factors influencing customer experience in the context of AI services, particulary perceived convenience, AI service quality, personalization, and brand engagement. Similarly, Abdelkader (2023) conducted an

online survey of 394 customers who interacted with ChatGPT in the context of digital marketing. The purpose of this study was to analyze the moderating roles of different factors (business type, gender, age, familiarity and comfort with technology) on the relationship between customer experience with ChatGPT and overall satisfaction in digital marketing.

Figure 4 Distribution of research approaches. *Source:* SCOPUS, Springer, Science direct and Web of Science databases.

4.2.1.3. Reference journals in research

Table 4 presents the distribution of publications on the impact of artificial intelligence (AI) on customer experience personalization by journal and year. The data indicate that research in this area remains relatively fragmented, with only two journals publishing three or more articles: the Journal of Retailing and Consumer Services (3 articles) and the Journal of Business Research (4 articles). The table also shows that three journals published two articles each: Technological Forecasting and Social Change (2 articles), Industrial Marketing Management (2 articles) and Reinvigorating the store (2 articles). Furthermore, the Table 4 shows s that research on AI and customer experience personalization has increased in recent years, reflecting a growing interest in this area among both researchers and practitioners.

Table 4 Frequencies of articles by journal and year.

	2019	2020	2021	2022	2023	2024	Total
Computers In Human Behavior			1				1
Data Science And Management						1	1
Discover Artificial Intelligence						1	1
Heliyon					1		1
Information Systems Frontiers					1		1
Reinvigorating the store					2		2
Technological Forecasting and Social Change				1	1		2
International Journal of Human-Computer Interaction			1				1
Industrial Marketing Management				1		1	2
International Journal Of Information Management						1	1
International Journal Of Recent Technology And Engineering	1						1
Journal Of Business Research	1		1		1	1	4
Journal Of Interactive Marketing		1					1
Journal Of Retailing And Consumer Services				1		2	3
Journal Of The Academy Of Marketing Science			1				1
Procedia				1			1
Total	2	1	4	4	6	7	24

Source: SCOPUS, Springer, Science direct and Web of Science databases.

4.2.1.4. Cartography of keyword connections

Figure 5 provides an overview of the co-occurrence of the keywords mentioned in the 24 articles selected for our systematic literature review. This bibliometric map was produced via VOSviewer software. The research reveals close links between artificial intelligence, personalization, and customer experience, allowing us to understand the relationships and interactions among various key concepts. At the center of the map, artificial intelligence is linked to various other keywords,

highlighting its essential role in contemporary marketing. AI is directly associated with expressions such as "personalization", "customer experience" and "AI marketing", which designate specific areas of application. The term "personalization" is closely linked to artificial intelligence (AI) and can be found in expressions such as "real-time personalization" and "playful customer experience". This development highlights the growing trend in marketing to rely on AI to create more relevant and engaging experiences, adapted to the individual needs of each customer. The keyword "Customer Experience" is situated at the intersection of several key areas, intrinsically linking "personalization" to "Big Data" and "fluid service". This convergence highlights how the improvement of the customer experience is achieved through the integrated use of artificial intelligence (AI), data analytics and service innovation.

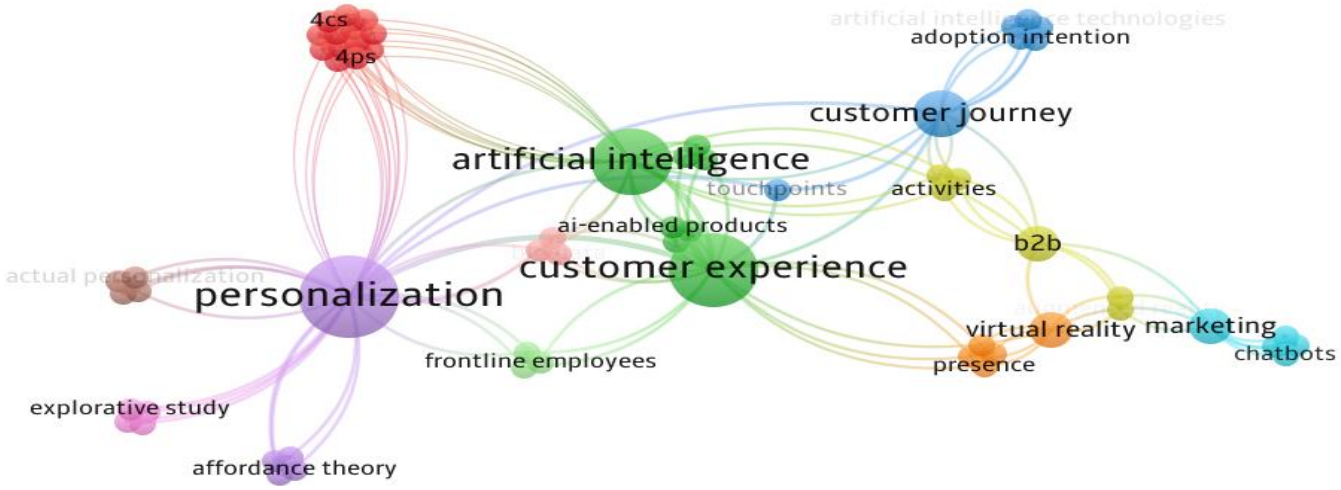

Figure 5 The co-occurrence of keywords. Source: VOSviewer.

4.2.2. Q2: What are the contributions of these studies?

An in-depth analysis of the 24 articles selected reveals the variety of objectives and issues addressed in the domain of artificial intelligence (AI) applied to customer experience, ranging from improving customer engagement to creating effective marketing strategies. The key results show a significant improvement in businesses' ability to personalize the customer experience, responding more effectively to the specific needs of their customers.

4.2.2.1. Objectives and problems addressed

The impact of artificial intelligence on the personalization of the customer experience was explored from various viewpoints by all the authors of the 24 articles selected (Kumar et al., 2024). Highlighted the personalization of marketing strategies through AI, highlighting pointing out the associated challenges, benefits and best practices. Similary, Hariguna et al. (2024) analyzed the efficacy of AI in improving customer performance (Abdelkader 2023). Investigated the moderating roles of customer experience with ChatGPT in digital marketing, whereas Weidig et al. (2024) focused on personalization and its impact on the cognitive, emotional and behavioral responses of customers. Furthermore, the specific use of AI technologies such as chatbots has been examined by (Li et al., 2023), who studied their use for customer retention and loyalty, and EL Bakkouri et al. (2022) reviewed on the role of chatbots in improving customer experience.

In terms of theoretical and methodological frameworks, Huang et al. (2021) proposed a strategic framework for integrating AI into marketing plans, and (Suraj et al., 2019) explored how AI can improve the customer experience by enabling better personalization and service quality. In addition, (Wang et al., 2024) developed and validated a scale to measure customer experience in the context of AI-enabled products.

With respect to the impact on consumer behavior, (Peruchini et al., 2024) provided an overview of the intersection between AI and customer experience, which is a less explored area than user experience is. Grewal et al. (2023) examined how in-store technologies, including robots and mobile applications, can increase employee efficiency and improve the customer experience in physical retail, whereas Canhoto et al. (2023) explored the contradiction between personalization and privacy in the context of AI-driven personalization in physical retail.

Ethical and trust challenges as well as service improvement opportunities have also been discussed. (Dhiman et al., 2023) investigated the value addition of AI in customer journeys, taking into account adoption options for these technologies. Moreover, (Scholdra et al., 2023) and (Flavián et al., 2019) analyze how personalization and customer interaction can be improved by VR and AI, with models such as the EPI Cube that evaluate the impact of technologies on different phases of the customer experience.

Finally, in terms of future developments and trends, (Vlačić et al., 2021) conducted a systematic review on the evolving role of AI in marketing, and (Hoyer et al., 2020) examined how new technologies are transforming the customer experience. These studies show that AI has the potential to revolutionize not only marketing but also the way companies engage with their customers, offering more personalized and engaging experiences.

4.2.2.2. Research approaches and results

In recent studies, the significant impact of artificial intelligence (AI) on the personalization of the customer experience has been highlighted. (Kumar et al., 2024) highlight the benefits of AI in modern marketing strategies, noting that its use improves customer engagement, loyalty and retention while presenting some challenges. Additionally, Huang et al. (2021) noted that the strategic integration of AI into marketing enables a more accurate understanding and anticipation of customer needs, facilitating effective personalization, but requires the use of a 3-stage model: marketing research, marketing strategy and marketing actions. On the other hand, (Grewal et al., 2023) and (Rustholllkarhu et al., 2022) examine the impact of emerging in-store technologies, with a particular focus on how they improve employee efficiency and customer experience. Their research demonstrated how technologies such as smart mirrors and mobile apps reduce friction, increase efficiency, and offer new experiences such as autonomous stores. Li et al. (2023) used a quantitative approach to demonstrate that chatbots can effectively retain customers through the use of affordance theory, highlighting the interaction and personalization capabilities of chatbots. Bilal et al. (2024) argued that AI enables deep personalization and has the potential to enhance consumer experiences while increasing customer engagement through emotional connections, leading to increased purchase intention and brand engagement. Similarly, Flavián et al. (2019) show how virtual, augmented and mixed reality technologies affect the customer experience. The results suggest that these technologies significantly improve customer engagement and enable greater personalization of experiences, enriching the different phases of the customer journey.

Personalization via AI is not limited to direct interactions but extends to decision-making processes and customer relationship management, as demonstrated by (Hariguna et al., 2024) who study the impacts of AI on customer performance and marketing decisions. On the other hand, Scholdra et al. (2023) reported that new technologies, such as mobile applications and augmented reality, play a crucial role in improving in-store personalization.

The work of Vlačić et al. (2021) highlights the need for continued reflection on the intersection between AI and customer experience, calling for further exploration of the dynamic capabilities that AI can offer. Furthermore, Peruchini et al. (2024) recognized that the most studied AI technologies at the convergence of artificial intelligence and customer experience involve machine learning applications, such as recommender systems, segmentation, predictive models and facial recognition, as well as conversational agents such as chatbots and voice bots.

The studies by Canhoto et al. (2023) address ethical and privacy issues, highlighting the personalization–privacy paradox and how it affects consumer perception. These ethical considerations are crucial to maintaining consumer trust in an increasingly automated environment.

4.2.2.3. Q3: What are the research gaps and limitations of the previous literature and what opportunities for future research can be derived to advance the use of artificial intelligence in the personalization of the customer experience?

Our analysis and synthesis of the literature on the impact of artificial intelligence (AI) on the personalization of the customer experience reveals remarkable contributions and advances in this field, which is constantly developing. However, it highlights the gaps and limitations of existing studies, the need to explore new avenues for a deeper understanding of the subject.

4.2.2.4. Research limitations and gaps

- Limited Sectoral Focus: Most of research focuses on certain sectors of activity and specific industries such as banking or retail, limiting the scope and applicability of results to other domains (Wieland et al. (2024), Suraj et al. (2019)). This restricted sectoral focus prevents a global understanding of the impact of AI on customer experience across all industries.
- Insufficient longitudinal studies: Long-term analysis of the impact of AI on customer experience necessitates longitudinal studies, which are currently rare (Rustholllkarhu et al. (2022); Riegger et al. (2022)). The lack of such studies limits our understanding of the long-term effects of IAs and their evolution over time.
- Privacy and Ethical Considerations: Data privacy and ethical issues are rarely addressed in depth in AI and customer experience research, despite their growing importance as technologies advance (Canhoto et al. (2023); Rustholllkarhu et al. (2022)). This disregard for ethical considerations raises major concerns about the responsible use of AI in the personalization of the customer experience.
- Geographic Limitation of Studies: The concentration of research on specific regions, often developed countries, neglects insights from emerging markets (Bilal et al. (2024); Flavián et al. (2019)). This narrow geographical focus limits the understanding of cultural and economic variations in the adoption and impact of AI on customer experience.

- Limited sample size and insufficient diversity: Some studies have small sample sizes, which limits the generalizability of the results to a larger population (Abdelkader (2023); Wang et al. (2024); EL Bakkouri et al. (2022)). Furthermore, samples may not be representative of the general population, often focusing on specific groups such as women or users of certain platforms, which may bias the results.
- Studies focused on specific countries: Many studies are conducted in developed countries, such as North America, Europe, or China, which may not capture the nuances of emerging markets where technologies and customer behavior may differ significantly (Li et al., 2023).

4.2.2.5. Prospects and possibilities for future research

- Sectoral and geographical extension: Exploring the impact of AI in a wider variety of sectors and regions is suggested to increase the generalizability of the results (Wieland et al. (2024), Abdelkader (2023); Wang et al. (2024); Bawack (2021); Li et al. (2023)).
- Standardizing methodologies: The authors recommend the adoption of standardized research methods to enhance the comparability of results and facilitate the synthesis of knowledge regarding the impact of AI on the personalization of customer experience (Suraj et al. (2019); Abdelkader (2023); Canhoto et al. (2023); Kumar et al. (2024); Bilal et al. (2024); Wieland et al. (2024)).
- Deeping longitudinal studies: The need for longitudinal research is emphasized to better understand the long-term effects of AI and to evaluate the evolution of the customer experience over time as clients interact with AI-compatible products. (Peruchini et al. (2024); Bawack (2021); Rusthollkarhu et al. (2022); Riegger et al. (2022);Hariguna et al. (2024); Wang et al. (2024); Lambillotte (2022)).
- Focus on ethical issues: Future research should address the ethical implications of AI use, including how to manage the technical challenges, such as data security, AI ethics and algorithm governance (Abdelkader (2023); Rusthollkarhu et al. (2022); Riegger et al. (2022)).
- Adoption of interdisciplinary approaches: The use of interdisciplinary approaches is encouraged to explore the intersection of AI with various aspects of customer experience, combining perspectives from different disciplines (Grewal et al., 2023).

5. Limitations of the Literature Review

This research has several limitations. First, the selection of studies included in the review could be subject to publication bias, due to the focus on specific databases and high-impact journals, potentially excluding relevant research from lesser-known sources. This bias could restrict the scope of the results and the representativeness of the conclusions. Second, the analysis of the data and the synthesis of the results may reflect subjective points of view, which is inevitable in research. On the other hand, the exclusive use of specific keywords in the bibliographic search may have restricted the scope of the results. The inclusion of synonyms and related terms could make it possible to identify more relevant studies, expand the analysis and enrich the conclusions. Finally, the fact that the review was conducted by myself may introduce a selection and interpretation bias. The presence of only one person in the process may also limit the ability to identify and correct errors of judgment or misinterpretation.

6. Final Considerations

This systematic review, conducted in accordance with the PRISMA methodology, has thoroughly examined the scope and depth of research concerning the application of artificial intelligence to the personalization of consumer experience. A series of studies were meticulously selected and reviewed the basis of predetermined criteria, ensuring a comprehensive assessment of the existing literature in this specific field.

To achieve this, we identified 24 primary studies from 195 articles on artificial intelligence from reputable electronic databases (Scopus, Web of Science, Springer and ScienceDirect) published during a five-year period (2019-2024). The studies that did not meet the specified inclusion criteria were excluded from the analysis. Through a systematic and structured analysis of the available literature, this study has identified promising applications of artificial intelligence that enhance personalization, improving the interaction between businesses and their customers.

The results of this review reveal that artificial intelligence enables a deeper understanding of customer preferences, contributing to more personalized and satisfying experiences. However, the studies included in the review also highlighted several important challenges, including the need to address ethical and privacy issues related to the use of customer data, as well as the need for more robust methodologies to assess the impact of artificial intelligence. The rigor imposed by the PRISMA method has ensured transparency and systematic selection and analysis of studies, enabling a reliable assessment of current data. However, this review is not without limits. The dependence on publications available in databases selected throughout the process may have limited access to certain valuable studies that are less visible or accessible.

In conclusion, this systematic review according to PRISMA has not only mapped the present state of research on the impact of artificial intelligence on the personalization of customer experience, but has also highlighted potential directions for future research. It is crucial that future studies explore the ethical, cultural and practical dimensions of the use of AI for successful and responsible integration into customer relationship management and marketing practices.

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Ethical Considerations

Not applicable.

Conflict of Interest

The authors declare no conflicts of interest.

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