



## Using artificial intelligence (AI) to enhance customer experience and to develop strategic marketing: An integrative synthesis

### ARTICLE INFO

Handling editor: Nicolae Nistor

#### Key terms:

Artificial intelligence  
Integrative framework  
Service recovery  
Personalization  
Disclosure  
Authenticity  
Parasocial interactions  
Chatbot implementations

### ABSTRACT

Artificial intelligence (AI) has emerged as a transformative force in both customer service and strategic marketing, enabling highly personalized interactions, innovative service recovery mechanisms, and dynamic communication strategies. This article synthesizes eleven empirically grounded studies that examine the multifaceted applications of AI across diverse settings, including service recovery, personalization, disclosure, authenticity, parasocial interactions, and chatbot implementations. By drawing on these contributions, this article proposes an integrative framework that elucidates the mechanisms by which AI shapes consumer behavior, addresses the balance between technological efficiency and human-like engagement, and confronts challenges associated with transparency, trust, and ethics. The findings advance theoretical understanding and offer practical recommendations to companies seeking to leverage AI as a strategic marketing tool. Future research directions and methodological challenges are discussed in depth.

### 1. Introduction

The advent of artificial intelligence (AI) marks a major revolution in the fields of marketing and customer experience, fundamentally transforming how companies interact with consumers and develop their marketing strategies (Ameen et al., 2021; Nalbant & Aydin, 2025). Over the past decade, the rise of AI technologies has enabled the creation of increasingly sophisticated tools ranging from real-time chatbots and highly personalized recommendation systems to virtual influencers. These technological innovations do more than merely replace human functions; they redefine interactions by introducing new emotional and cognitive dimensions that significantly influence consumer decision-making (Sahut et al., 2019). This transformation occurs in an environment where digitization and personalization have become critical competitive factors for companies seeking to differentiate themselves in increasingly crowded markets (Mustak et al., 2021).

This article provides a synthesis based on an in-depth analysis of eleven empirical studies published as part of a special issue of *Computers in Human Behavior*, entitled “Using artificial intelligence to enhance customer experience and to develop strategic marketing.” The selected studies, drawn from various contexts and regions, provide a rich and diverse panorama of AI applications in customer relationship management and strategic marketing (Song et al., 2022). They explore topics as varied as the warm responses of conversational agents during service failures, the personalization of marketing content on social media, the credibility of virtual influencers, the verification of authenticity in AI-powered service applications, and the impact of emotional responses, such as awe (Pizzolante et al., 2023), elicited by AI-generated content on continued usage intentions. Each study contributes uniquely to the

existing literature by offering both theoretical and empirical insights that enhance our understanding of the underlying mechanisms governing interactions between AI systems and consumers.

To situate this research within a broader context, it is important to acknowledge that the rise of AI is inseparable from the rapid evolution of digital technologies and the digital transformation of businesses (Jabeur et al., 2023). Companies are not only seeking to improve operational efficiency, but also to provide personalized and engaging customer experience. Consumers, on the other hand, are increasingly demanding interactions that are not only functional, but also imbued with human-like warmth and empathy. As a result, the integration of AI into marketing strategies is driven by a dual objective: optimizing operational performance while cultivating strong, trust-based relationships with consumers.

The studies included in this synthesis are distinguished by their multidimensional approach to AI. Some research emphasizes the importance of warm responses from conversational agents to mitigate negative customer experiences. For example, the study by Wang et al. (2025) demonstrates that a warm response, capable of simulating human empathy, not only offsets the adverse effects of service failures, but also encourages repeat usage. Other studies, such as those by Tee-papal (2025) and Jansen et al. (2024), focus on the impact of personalized AI-driven marketing messages on consumer trust and engagement (Sahut et al., 2022). These studies underscore that personalization, by making marketing messages more relevant to individual consumers, strengthens customer relationships and enhances the effectiveness of promotional strategies.

Furthermore, recent research has investigated the credibility of virtual influencers compared to traditional human celebrities. The study by

<https://doi.org/10.1016/j.chb.2025.108684>

Received 3 April 2025; Received in revised form 17 April 2025; Accepted 24 April 2025

Available online 30 April 2025

0747-5632/© 2025 Elsevier Ltd. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

Song et al. (2024) examines the differential effects of AI endorsers and human endorsers on consumer purchase intention. It reveals that for “search products,” where consumers rely on objective product attributes, AI endorsers are very effective. In contrast, for “experience products,” which require sensory evaluation, human celebrity endorsers have a greater impact. These findings highlight the critical importance of aligning the characteristics of the endorser with the product type and with consumer expectations.

Another major contribution of this synthesis lies in its analysis of the emotional mechanisms induced by AI. For instance, Zhao et al.’s (2025) research introduces an innovative dual conceptualization of awe—both positive and threatened—and explores how the conversational features of AI (accuracy, competence, anthropomorphism, and interactivity) influence users’ intentions to continue using AI-generated content. The study finds that positive awe, elicited by features such as competence, interactivity, and anthropomorphism, strongly drives continued usage, while threatened awe exerts a comparatively weaker negative influence. These insights suggest that designing AI systems to maximize positive emotional responses is crucial for fostering long-term consumer engagement.

Finally, it is essential to recognize that the transformation driven by AI extends beyond customer-technology interactions to encompass the development of hybrid service models. For instance, the study on chatbots in the banking and financial sectors (Graham et al., 2025) demonstrates that, although automation delivers impressive efficiency gains, it is insufficient when handling complex or emotionally nuanced customer interactions. A hybrid approach—combining AI automation with human oversight—appears to be the optimal solution for meeting the high standards required in industries where both precision and empathetic customer service are paramount.

In conclusion, this synthesis aims to bridge technological advancements with fundamental consumer needs. By integrating diverse perspectives—from emotional engagement and personalization to credibility and hybrid service models—this research offers a comprehensive view of the transformations induced by AI in marketing. It emphasizes the necessity of a balanced approach that combines cutting-edge technology with human-centric design to create customer experiences that are not only efficient and effective, but also authentic and emotionally engaging. This article thus lays the foundation for a deeper exploration of the role of AI in modern marketing strategy, while also highlighting new research directions and practical implications for managers and policymakers alike.

The remainder of the article is organized as follows. Section 2 outlines the methodology used for synthesizing the literature, describing the systematic content extraction, thematic coding, and integrative framework that guided the analysis. Section 3 provides detailed reviews of the eleven selected studies, discussing each study’s context, methods, findings, and contributions. In Section 4, the article synthesizes cross-study themes, elaborating on their theoretical implications and practical relevance. Section 5 offers critical discussion of research gaps and suggests promising avenues for future research. Finally, Section 6 concludes the article by summarizing the key insights and outlining the broader implications for academic research and managerial practice.

## 2. Methodological approach of the synthesis

To integrate the diverse contributions of the eleven selected studies into a coherent narrative, a rigorous and systematic methodology was used. The methodology comprised multiple stages, each designed to ensure that every relevant aspect of each study was captured and that the cross-cutting themes emerging from the literature were identified and critically analyzed. This section details the processes of content extraction, thematic coding, framework development, and analytical strategy that underpinned the synthesis (Sahut et al., 2024). Although this approach has ensured a comprehensive synthesis, we acknowledge that the sample of studies selected may be subject to certain biases as it is

the result of the reviews’ evaluation process. In particular, there is no regional representativeness. The majority of studies come from Asia and Europe (see the appendix), which could limit the generalization of the results to other cultural contexts. Future research should aim to incorporate studies from under-represented regions in order to validate and extend the integrative framework presented here.

### 2.1. Content extraction and coding

The first step involved a comprehensive content extraction process. Each study was examined in depth by reviewing key sections such as the introduction, literature review, methodology, results, discussion, and conclusion. During this stage, special attention was given to the articulation of theoretical frameworks, the research questions posed, the empirical methods employed, and the key findings reported by the authors. Detailed notes were taken on each element, ensuring that the nuances of each study were captured. The goal of this process was not only to summarize each study, but also to understand its unique contribution to the broader field of AI in customer experience and strategic marketing.

Following the content extraction, the next stage was to develop a thematic coding schema. This process involved reading through the extracted notes to identify recurring themes, constructs, and variables across the studies (Manset et al., 2017). Common themes that emerged included personalization, service recovery, transparency, authenticity, parasocial interactions, hedonic responses, and the role of hybrid service models. These themes were then coded systematically, with each study being examined to determine how it contributed to or expanded upon these recurring ideas. This rigorous coding process provided the foundation for an in-depth comparative analysis, allowing for both convergent and divergent findings to be identified.

### 2.2. Development of an integrative framework

Building upon the coded themes, an integrative framework was developed to capture the mechanisms by which AI influences customer experience and strategic marketing outcomes. The framework posits three primary pathways.

- Emotional and social engagement: How AI interfaces incorporate warmth, empathy, and anthropomorphic cues.
- Personalization and trust building: How tailored recommendations and data-driven insights foster consumer trust and loyalty.
- Transparency and authenticity: How disclosure of AI involvement and design features affect perceived authenticity and content quality.

To construct this framework, the process involved mapping each study’s contributions onto these pathways. This mapping was iterative, involving several rounds of comparison and refinement to ensure that the framework accurately reflected the multifaceted nature of AI’s impact as documented in the selected articles. The resulting framework not only serves as an organizing structure for the synthesis, but also contributes to theoretical development by linking disparate findings into a unified model.

### 2.3. Analytical approach

The final methodological stage was the analytical strategy. This strategy combined descriptive synthesis, comparative analysis, and critical evaluation. In the descriptive synthesis, the key points from each study were narrated in a continuous prose format, ensuring that the reader could follow the progression of ideas without interruption. The comparative analysis involved juxtaposing findings from different studies to identify areas of agreement, conflict, and gaps in the literature. This process was critical in highlighting the strengths and limitations of existing research, and in drawing out the implications for theory

and practice. Finally, the critical evaluation assessed the methodological rigor of each study, the robustness of their findings, and their relevance to both academic and managerial audiences. This comprehensive analytical approach provided a robust foundation for the synthesis and ensured that the resulting integrative narrative was both coherent and insightful.

To ensure conceptual coherence across the eleven selected studies—each employing distinct empirical designs and operating in varied contexts—we implemented a structured analytical procedure that included a decision-matrix assessment and a multi-step reconciliation process. This approach was critical to achieving a robust synthesis while preserving the integrity of each study's unique contributions.

First, we developed a decision matrix to assess each study according to three weighted criteria: methodological rigor, sample size, and contextual relevance to the central themes of AI-driven customer experience and strategic marketing. Each study was assigned a score (1–3) on each dimension, allowing us to establish relative interpretive weight without excluding any study from the synthesis. This matrix facilitated an evidence hierarchy that supported triangulation when findings were either partially overlapping or explicitly divergent.

Second, in cases of apparent contradiction—for example, on the effects of AI disclosure on consumer engagement and content quality—we conducted a comparative contextual analysis. Rather than viewing contradictions as inconsistencies, we examined underlying moderators such as product category (e.g., search vs. experience goods), consumer familiarity with the platform, or AI design attributes (e.g., competence signaling, or anthropomorphism). This process revealed that many divergences stemmed not from true disagreement, but from differences in context or framing.

For instance, while [Chen et al. \(2025\)](#) found that AI disclosure enhances engagement in short-form video content, [Song et al. \(2024\)](#) observed that disclosure may reduce perceived content quality. These findings were reconciled through thematic triangulation: when disclosure is paired with strong competence cues, engagement remains high; however, absent such cues, disclosure may introduce doubts about authenticity or production quality. This insight allowed us to reinterpret transparency as a conditional factor, with its effects moderated by consumer expectations and design communication.

Finally, where no clear convergence could be established, we preserved the pluralism of findings by explicitly identifying points of tension in our discussion. Rather than forcing artificial consensus, we highlighted areas where contextual or methodological differences warranted future investigation. This integrative yet critical posture ensures that this synthesis reflects both the empirical coherence and the evolving complexity of AI-marketing interactions.

### 3. Detailed analysis of selected articles

In this section, each of the 11 selected articles is reviewed in depth (see [Table 1](#) in the appendix). The 11 articles were selected from the 59 articles submitted (an acceptance rate of 18 %, this includes desks rejects and transfers of articles to other journals) by scrupulously following the journal's evaluation process, which involved between two and six evaluation rounds. The discussion elaborates on the theoretical context, empirical design, and key findings of each study, while also examining how these contributions enhance our understanding of artificial intelligence in customer experience and strategic marketing.

#### 3.1. AI warm response in service recovery

The article entitled “Exploring the effect of AI warm response on consumer reuse intention in service failure” by [Wang, Ni, Yuan, and Tang \(2025\)](#) extends the service recovery literature by integrating the concept of an AI warm response. The authors draw on social presence theory to hypothesize that AI agents capable of evoking interpersonal warmth can alleviate the negative effects of service failures. In a series of

four controlled experiments, the research demonstrates that higher levels of AI warmth significantly increase the likelihood that consumers will reuse the service following a failure. The authors further identify social presence as a mediating variable, indicating that the ability of AI agents to simulate human-like empathy plays a critical role in influencing consumer behavior. This study makes a significant theoretical contribution by demonstrating that AI systems designed with warmth and empathy can substitute for human intervention in service recovery scenarios, thereby informing both academic debates and managerial practices regarding the design of customer service technologies.

#### 3.2. AI-driven personalization in social media engagement

[Teepapal's \(2025\)](#) article, entitled “AI-driven personalization: Unraveling consumer perceptions in social media engagement,” explores the impact of personalization stimuli on consumer perceptions within social media environments. Utilizing the Stimulus–Organism–Response framework, the study investigates how personalized content influences dimensions such as trust, perceived usefulness, and privacy concerns. Through the application of Structural Equation Modeling, the research reveals that AI-driven personalization has a positive effect on consumer engagement, primarily through the mediation of trust and perceived usefulness. Although privacy concerns are acknowledged, their impact is not significant enough to detract from engagement in this context. This study contributes to the literature by empirically validating the S–O–R framework in the realm of digital marketing and by demonstrating that the benefits of personalized marketing messages may outweigh potential privacy risks when appropriately managed. The practical implications of this research are relevant to marketers seeking to leverage data-driven personalization to enhance consumer engagement on social media platforms.

#### 3.3. Recommender systems in online grocery shopping

The systematic literature review article, entitled “Online grocery shopping recommender systems: Common approaches and practices” by [Jansen, Bennin, van Kleef, and Van Loo \(2024\)](#), provides an extensive examination of recommender systems within the online grocery shopping sector. The authors analyzed fifty research papers and organized the literature according to five stages of recommendation delivery, ranging from goal identification to the presentation of recommendations. The review reveals that while most recommender systems are preference-based, there is a noticeable gap in the integration of explicit consumer consent and in the systematic collection of user feedback. This study not only maps the evolution of recommender systems in a domain characterized by high consumer data volumes, but it also identifies critical methodological gaps that could inform future research. The findings offer practical guidance to developers and marketers, urging them to incorporate ethical considerations and consumer-centric evaluation metrics in the design of recommender systems.

#### 3.4. AI disclosure in short-form video content

In the article entitled “AI in the spotlight: The impact of artificial intelligence disclosure on user engagement in short-form videos,” [Chen, Wang, and Hao \(2025\)](#) examine how the disclosure of AI involvement affects viewer engagement. Grounded in the heuristic-systematic processing model, the research investigates the dual effects of AI disclosure on user perceptions. The study employs a moderated mediation design, collecting data via an online experiment on the Credamo platform. The findings indicate that while the disclosure of AI usage can enhance user engagement by promoting transparency, it may simultaneously reduce perceived content quality if not coupled with strong signals of AI competence. This research contributes to the literature by identifying a disclosure paradox, wherein the benefits of transparency must be carefully balanced against potential downsides. From a managerial

perspective, the study underscores the need for communication strategies that effectively convey both the technological capabilities and the reliability of AI systems.

### 3.5. Authenticity in AI-powered service apps

The article, entitled “What makes an app authentic? Determining antecedents of perceived authenticity in an AI-powered service app” by Vo, Nguyen, Dang-Pham, and Hoang (2025), addresses the complex issue of authenticity in digital service applications. The authors integrate regulatory engagement theory with parasocial interaction perspectives to examine how factors such as media richness, brand attitudes, and co-branding fit influence perceptions of authenticity. Using fuzzy-set Qualitative Comparative Analysis, the research identifies multiple configurations that lead to high levels of perceived authenticity, demonstrating that authenticity is a multidimensional construct that requires a holistic approach. The study’s theoretical contribution lies in its reconceptualization of authenticity within the context of AI-powered applications, offering practical insights for app developers and marketers who seek to build trust and loyalty through authentic digital experiences.

### 3.6. Credibility of social media robot influencers

In the article entitled “Are social media robot influencers credible? A cross-continental analysis in a fashion context,” Baudier and De Boissieu (2025) extend the traditional source credibility theory by exploring the credibility of social media robot influencers (SMRs) in the fashion context. They investigate how dimensions such as trustworthiness, expertise, physical attractiveness, and content quality contribute to consumer perceptions of credibility. Using a cross-continental survey and Partial Least Squares analysis, the research demonstrates that while these dimensions are significant predictors of credibility, factors such as the perceived similarity between influencers and followers do not have a substantial impact. The study provides a theoretical extension by adapting source credibility theory to the digital age and offers practical recommendations for the design of anthropomorphic AI influencers. The insights gleaned from this research are particularly relevant to fashion marketers seeking to harness the persuasive power of AI-driven social media influencers.

### 3.7. Hedonic responses and risk mitigation in autonomous retail

In the article entitled “Autonomous technology in the marketplace: The impact of enjoyment on consumer responses,” (Rohden et al., 2025) examine the role of enjoyment in influencing consumer responses within autonomous retail environments. Their study hypothesizes that enjoyable interactions with AI systems can reduce perceived risk and encourage self-disclosure. Drawing on data from a survey and two single-factor experiments, the authors demonstrate that higher levels of enjoyment are associated with lower risk perceptions and increased willingness to share personal information. The study also reveals that perceptions of technology autonomy and competence mediate the relationship between enjoyment and consumer behavior. This research contributes to the literature by integrating hedonic factors into models of technology adoption, thereby offering a more comprehensive understanding of how emotional responses can mitigate risks associated with autonomous technologies. The findings have significant practical implications, suggesting that retailers should design AI interactions that are both efficient and pleasurable to enhance customer engagement.

### 3.8. Parasocial relationships in human–computer interaction

The article entitled “An assistant or a friend? The role of parasocial relationship in human–computer interaction,” by Qi, Liu, and Huang (2025) investigates the dual nature of parasocial relationships in the

context of human–computer interactions. They differentiate between two relationship modalities - “assistant” and “friend” - and examine how these influence perceptions of competence and warmth. Through a series of controlled experiments, the study finds that AI agents with “assistant” characteristics are more likely to enhance perceptions of competence, while those designed with “friend” attributes are more effective at evoking warmth. The research further explores the moderating role of gender traits embedded in AI design, providing nuanced insights into the dynamics of human–computer interactions. This study extends parasocial interaction theory to the realm of artificial intelligence and offers important guidance for the design of AI interfaces that are aligned with specific marketing and service objectives.

### 3.9. Chatbots in banking and finance

In the article entitled “Chatbots in customer service within banking and finance: Do chatbots herald the start of an AI revolution in the corporate world?” Graham, Nisar, Prabhakar, Meriton, and Malik (2025) investigate the role of chatbots in customer service within the banking and finance sector. Their qualitative study explores the potential of chatbots to revolutionize customer service by providing convenient, around-the-clock support, while also acknowledging the current limitations in handling complex queries. Through in-depth interviews and expert surveys, they illustrate that while chatbots are valued for their efficiency and speed, there is a pressing need for a hybrid service model that incorporates human oversight to manage more nuanced customer issues. This study contributes to the literature by mapping the current state of chatbot technology in a critical industry and proposing an experimental framework for future research. The insights offered by this research are particularly relevant to financial institutions aiming to integrate AI solutions without compromising service quality.

### 3.10. The influence of endorser type on online purchase intention

The article entitled “AI or human: How endorser shapes online purchase intention?” by Song, Wang, Zhang, and Hikkerova (2024) extends the literature on influencer marketing by comparing the effects of AI endorsers versus real human endorsers. This study adopts the Source Attractiveness Model and the Match-Up Hypothesis as theoretical lenses to explore whether the virtual qualities of AI endorsers can effectively stimulate purchase intentions across different product types. In two quantitative studies, the authors reveal that when recommending search products, where consumers rely on objective attributes, AI endorsers are particularly effective in stimulating purchase intentions. In contrast, for experience products that require sensory and affective evaluation, traditional celebrity endorsers yield stronger purchase intentions. Furthermore, the study demonstrates that the relationship between endorser type and purchase intentions is mediated by perceptions of congruency; self-image congruency plays a crucial role in the context of AI endorsers for search products, while functional congruency mediates the effectiveness of celebrity endorsers for experience products. The findings contribute to the literature by highlighting that the fit between product characteristics and endorser type is critical for endorsement effectiveness and by providing nuanced managerial guidance on selecting endorsers based on product type.

### 3.11. Emotional mechanisms and continued usage of AIGC

The article entitled “‘Positive’ or ‘threatened’? The impact of the features in generative artificial intelligence on continued behavior,” by Zhao, Xu, and Zhou (2025) focuses on the emerging phenomenon of artificial intelligence-generated content (AIGC). Using a mixed-methods approach that combines quantitative survey data (N = 860) and qualitative analysis of user reviews, the study investigates how the features of AIGC—namely, accuracy, competence, anthropomorphism, and interactivity—influence users’ emotional experiences and their subsequent



continued usage intentions. Central to this study is the dual conceptualization of awe as both a 'positive' and a 'threatened' experience. The analysis reveals that while positive awe (elicited by competence, anthropomorphism, and interactivity) has a robust positive effect on continued usage intentions, threatened awe has a comparatively weaker negative effect. Interestingly, accuracy, despite being a core technical feature, does not evoke strong emotional responses beyond a threshold; users appear to regard accuracy as a baseline expectation. This research enriches our understanding of the affective mechanisms underlying technology continuance and provides actionable insights for enhancing user experience in AIGC systems.

#### 4. Synthesis of cross-cutting themes

The integration of insights from these eleven studies reveals a complex and multifaceted landscape in which artificial intelligence (AI) influences customer experience and strategic marketing. In synthesizing the findings, several cross-cutting themes emerge that not only bridge individual study contributions, but also point toward an integrative understanding of how AI reshapes both consumer behavior and organizational practices (Wirtz, 2020). While the synthesis identifies both positive and threatened awe as key emotional responses influencing consumer behavior, the nuanced mechanisms underlying these phenomena warrant further elaboration. For instance, the data suggest that positive awe—elicited by AI attributes such as competence and anthropomorphism—significantly drives user engagement, whereas threatened awe, though present, exerts a comparatively attenuated negative effect. These contrasting dynamics are illustrated by examples from the studies by Zhao et al. (2025) and Qi et al. (2025), which demonstrate the differential impacts of emotional responses on both initial adoption and continued usage. Such an expanded analysis offers a richer theoretical and practical insight into the affective dimensions of AI interactions.

##### 4.1. Emotional engagement and social presence

A central theme across the studies is the pivotal role of emotional engagement and social presence in driving consumer interactions with AI systems (Vanhala et al., 2020). Research on AI warm response (Wang et al., 2025) and parasocial relationships (Qi et al., 2025) demonstrates that when AI interfaces simulate human-like warmth and empathy, they foster a sense of social presence that is critical for building consumer trust. These studies consistently show that positive emotional cues, such as warmth and empathy, can mitigate negative experiences (for example, following a service failure) and promote customer loyalty. This observation is further bolstered by the study on AIGC (Zhao et al., 2025), where the experience of positive awe—an emotional response to sophisticated, human-like features—plays a substantial role in encouraging continued usage. In contrast, while threatened awe is present, its negative influence is comparatively weaker. This pattern suggests that the success of AI systems hinges on their ability to evoke positive emotional responses, thereby transforming what could be a purely functional interaction into a more engaging, socially enriched experience.

##### 4.2. Personalization and congruency

Another prominent theme is the strategic importance of personalization and congruency. Studies by Teepapal (2025) and Jansen et al. (2024) illustrate that personalized interactions, such as tailored recommendations, significantly enhance consumer trust and perceived usefulness. These findings are complemented by the research on AI versus human endorsers (Song et al., 2024), which reveals that the congruency between the endorser and the product type is a critical determinant of marketing effectiveness. In the context of search products, AI endorsers generate high purchase intentions when they resonate

with the consumer's self-image, while for experience products, celebrity endorsers who align with the product's functional attributes yield better results. This convergence of evidence underscores that the alignment between consumer identity, product characteristics, and the attributes of the endorser is not merely beneficial—it is essential for optimizing marketing outcomes.

##### 4.3. Transparency and authenticity

Transparency and authenticity emerge as salient themes in the synthesis. The study on AI disclosure (Wang et al., 2025) shows that while transparency in disclosing AI involvement can boost engagement by building trust, it may simultaneously detract from perceived content quality if not managed carefully. Similarly, the work on perceived authenticity in AI-powered service apps (Vo et al., 2025) suggests that authenticity is a multifaceted construct, influenced by media richness, brand reputation, and the interplay between digital presentation and human-like cues. When extended to the realm of influencer marketing, the research on endorser effectiveness (Song et al., 2024) indicates that authenticity—whether in the form of AI or human endorsements—can determine the overall success of the campaign. Taken altogether, these studies suggest that authenticity is not an inherent quality of the technology itself, but rather an emergent property that results from the interplay between design elements, communication strategies, and consumer expectations.

##### 4.4. Need for hybrid service models that effectively balance AI-driven efficiency with human oversight

This theme has significant managerial relevance. The study on chatbots in the banking and finance sector (Graham et al., 2025) underscores that while automation offers considerable benefits in terms of speed and availability, it may fall short when addressing complex or emotionally nuanced customer issues. In such high-stakes environments, a hybrid approach that integrates AI with human intervention ensures that the limitations of technology do not compromise service quality. This idea is further reinforced by the research on AI warm response, which implies that even advanced AI systems require the infusion of human-like emotional cues to maximize their effectiveness.

##### 4.5. Importance of integrating affective and cognitive dimensions into a single framework

The evidence from the study on AIGC (Zhao et al., 2025) illustrates that while technical features such as accuracy, competence, anthropomorphism, and interactivity are critical, their impact is mediated by the emotional responses they evoke. In particular, positive awe—stemming from competence, interactivity, and anthropomorphic features—can significantly drive continued usage intentions, whereas accuracy, despite being fundamental, quickly becomes a baseline expectation that does not further enhance emotional engagement. This dual emphasis on affective and cognitive outcomes calls for a more holistic model of AI interaction that captures both the measurable performance of AI systems and the subtler, affect-driven elements that contribute to long-term consumer loyalty.

Finally, the interplay among these themes suggests that the future of AI in marketing will depend on an integrated strategy that considers emotional engagement, personalization, transparency, authenticity, and hybrid service models in tandem. Organizations must design AI applications that are not only technically robust, but also capable of engaging users on an emotional level. For marketers, this means adopting a multi-dimensional approach where technology is leveraged to create personalized, authentic, and emotionally resonant customer experiences (Lu et al., 2020).

In summary, the synthesis of cross-cutting themes from the eleven studies paints a comprehensive picture of how AI reshapes customer

experience and strategic marketing. The findings underscore that emotional engagement, personalization, congruency, transparency, authenticity, and hybrid service models are not isolated factors, but interconnected components that together determine the success of AI applications in marketing. These insights provide a rich foundation for both theoretical advancement and practical implementation in the field of AI-driven marketing (Rangaswamy et al., 2020).

## 5. Theoretical and managerial implications

The comprehensive integration of findings from these eleven studies offers substantial theoretical advancements and practical insights for both academia and industry. This section delineates the implications of the synthesized research for theory development and managerial practice, highlighting how the evolving landscape of AI applications necessitates new frameworks and strategies.

### 5.1. Theoretical implications

From a theoretical perspective, the synthesis reinforces and extends traditional models of technology adoption and user engagement. Classical frameworks such as the Technology Acceptance Model (TAM) and the Unified Theory of Acceptance and Use of Technology (UTAUT) have predominantly focused on functional aspects like perceived usefulness and ease of use (Sahut & Lissillour, 2023). However, the integration of emotional dimensions—such as warmth, awe, and social presence—demonstrates that affective responses play a critical role in determining not only initial adoption but also continued usage. For instance, the findings from Zhao et al. (2025) on AIGC reveal that positive awe significantly drives continued usage intentions, suggesting that emotional satisfaction should be incorporated as a key variable in future models. This integration calls for the development of a more holistic framework that combines cognitive, emotional, and behavioral factors to predict and explain user interactions with AI systems.

Additionally, the extension of source credibility theory through the examination of AI versus human endorsers (Song et al., 2024) contributes to a nuanced understanding of how credibility is constructed in digital environments. The differentiation between self-image congruency and functional congruency as mediators of purchase intentions provides a new lens through which to view endorsement effectiveness. This theoretical advancement challenges the traditional binary of human versus AI endorsements, advocating instead for a more dynamic model that accounts for the interplay between product type, endorser attributes, and consumer self-concept. Such refinements have the potential to inform a new generation of credibility models that are better suited to the digital age.

Moreover, the synthesis underscores the need to consider transparency and authenticity as central constructs in the theory of AI-driven marketing. Studies on AI disclosure and perceived authenticity highlight that these elements are not merely add-ons, but they are fundamental to building consumer trust. The paradoxical findings—that increased transparency may sometimes lower perceived content quality—suggest that theoretical models must account for the complexity of consumer perceptions in the digital world. By integrating transparency and authenticity into existing frameworks, researchers can develop more robust models that explain not only the adoption of AI technologies, but also the sustainability of their use over time.

### 5.2. Managerial implications

From a managerial standpoint, the implications are equally significant. One of the foremost recommendations is the strategic design of AI systems that evoke positive emotional responses. Organizations should invest in developing AI interfaces that incorporate human-like warmth and empathy, as these features have been shown to enhance customer satisfaction and loyalty. For example, the empirical evidence on AI

warm response indicates that emotionally engaging AI agents can significantly mitigate the negative impacts of service failures, suggesting that managers should prioritize emotional design in customer service applications.

Furthermore, the research on personalization and congruency provides practical guidance on tailoring marketing strategies to specific product types. The findings from Song et al. (2024) indicate that AI endorsers may be more effective for search products, where consumers are driven by objective criteria and self-image congruency. Conversely, for experience products that require sensory evaluation, traditional celebrity endorsers may yield better outcomes due to their ability to convey functional congruency. Managers can leverage these insights to optimize endorsement strategies by aligning the choice of endorser with the intrinsic characteristics of the product, thereby maximizing the marketing impact.

Transparency and authenticity also emerge as critical managerial considerations. As organizations increasingly disclose the use of AI in their operations, they must develop communication strategies that highlight both the technological capabilities and the reliability of their systems. The synthesis suggests that maintaining a balance between transparency and quality is essential. Overly detailed disclosures may backfire if they compromise the perceived quality of the content. Managers should, therefore, craft disclosure messages that emphasize the competence and reliability of AI systems, while reassuring consumers of their commitment to high-quality service.

Finally, the evidence supporting hybrid service models offers a compelling case for integrating AI with human oversight. In industries such as banking and finance, where complex decision-making and emotional nuances are paramount, a hybrid approach can capitalize on the strengths of both automated systems and human agents. By combining the efficiency of AI with the empathetic judgment of human service representatives, organizations can deliver a more balanced and effective customer experience. This approach not only mitigates the limitations of AI in handling complex queries, but it also reinforces consumer trust by ensuring that human expertise remains an integral part of the service process.

In summary, the theoretical implications of the synthesized research call for the development of integrative models that capture the multifaceted nature of AI interactions, incorporating cognitive, emotional, and behavioral dimensions. Meanwhile, the managerial implications provide a roadmap for designing and implementing AI strategies that enhance customer experience while maintaining authenticity, transparency, and a human touch. Together, these insights offer a robust foundation for both future research and practical innovation in the rapidly evolving field of AI-driven marketing.

## 6. Future research directions

The synthesis of the eleven studies reveals not only a robust body of knowledge regarding the application of artificial intelligence in enhancing customer experience and strategic marketing, but it reveals several gaps and unresolved issues that present fertile ground for future research. In this section, we propose several avenues for future inquiry, organized around methodological, theoretical, and practical challenges, and we discuss the potential contributions of each research direction in advancing the field. The first section presents avenues of methodological research, and the second section outlines other substantive avenues.

### 6.1. Avenues of methodological research

#### 6.1.1. Longitudinal research designs

One promising area for research is the adoption of longitudinal research designs to examine the evolution of consumer attitudes and behavioral responses over time (Nazir et al., 2023). Many of the current studies provide valuable cross-sectional snapshots of consumer reactions to AI features such as warmth, personalization, and transparency.

However, consumer perceptions are likely to evolve as AI technologies mature and as users gain more exposure to and familiarity with these systems. Longitudinal studies could track changes in factors such as emotional engagement, trust, and continued usage intentions. For instance, researchers might investigate how initial excitement or novelty—characterized by positive awe—transitions into sustained engagement or, conversely, disengagement due to factors like the saturation of expectations regarding accuracy. Such temporal analyses would not only reveal dynamic patterns in consumer behavior, but they could help identify the long-term impacts of AI adoption on customer loyalty and brand equity.

*Illustrative research questions:* “How do consumers’ trust and emotional responses change over 6–12 months of interacting with AI?” “What are the long-term effects of initial positive awe on customer loyalty?”

#### 6.1.2. Advanced experimental designs

In addition to temporal and cultural dimensions, researchers should employ advanced experimental designs that incorporate multiple interacting variables. The complexity of AI interactions suggests that single-factor experiments may not fully capture the interplay between various features such as accuracy, competence, anthropomorphism, and interactivity. Factorial experiments that simultaneously manipulate all these variables could provide a more comprehensive picture of the boundary conditions under which AI systems are most effective. For instance, researchers could explore how variations in anthropomorphic designs interact with different types of product attributes—such as search versus experience products—to influence consumer purchase intentions. Such multi-factorial designs would enable a more nuanced understanding of how combinations of AI features drive consumer behavior and would help in refining the integrative theoretical frameworks proposed in the current synthesis.

*Illustrative research questions:* “Which combinations of AI design features most strongly influence consumer behavior?” “How do interactive cues vary in their impact on search versus experience products?”

#### 6.1.3. Mixed-method approaches

As demonstrated by Zhao et al. (2025) in their study of AIGC, the mixed-methods approach provides another promising research direction. Combining quantitative surveys with qualitative interviews or ethnographic observations allows researchers to capture both the measurable effects of AI features and the deeper, subjective experiences of users. Qualitative data can reveal the underlying cognitive and affective processes that drive consumer responses, such as how users interpret the emotional cues of an AI system, or how they negotiate their own expectations in the face of technological novelty. Future studies could leverage mixed-method designs to triangulate findings, thereby increasing the robustness and generalizability of the results. Moreover, the integration of big data analytics with qualitative insights could uncover latent patterns and emergent themes that are not immediately apparent through traditional research methods.

*Illustrative research questions:* “How can qualitative insights enrich survey data on AI-driven customer engagement?” “Which mixed-method designs best capture the subtleties of emotional responses to AI?”

#### 6.1.4. Simulation and virtual reality testing

Leveraging immersive environments and simulation models to test consumer reactions in controlled, yet realistic, AI interactions; offering a methodological bridge between lab experiments and real-world settings.

*Illustrative research questions:* “How do consumers respond to AI interfaces in a virtual reality setting?” “Can simulation models predict real-world customer behavior with AI systems?”

#### 6.1.5. Big data analytics on AI interaction logs

Employing advanced analytics on real-time user data to uncover

patterns in engagement, trust, and emotional responses; complementing controlled experiments with naturalistic observations of AI use.

*Illustrative research questions:* “What insights can be gained from analyzing AI interaction logs across multiple platforms?” “How do real-time engagement patterns correlate with customer satisfaction over time?”

#### 6.1.6. Developing new measurement instruments

In parallel, researchers should also focus on the development of refined measurement instruments that can capture the complex constructs associated with AI interactions. Constructs such as AI warmth, positive and threatened awe, and authenticity are central to the current synthesis, yet the available measurement scales are still in early stages of development. Researchers should aim to create and validate robust instruments that can be used across different contexts and technologies. These instruments would enable more precise assessments of how specific AI features affect consumer attitudes and behaviors. In addition, the development of multi-dimensional scales that capture both the cognitive and affective responses to AI could facilitate a more detailed analysis of user experience, thereby advancing both theoretical models and practical applications.

#### 6.1.7. Iterative approach to theory development

Finally, the rapid pace of technological change itself calls for ongoing research that continuously updates and refines current theoretical frameworks. As new AI applications emerge—ranging from advanced conversational agents to highly immersive virtual influencers—the boundaries of what is possible in digital marketing are constantly being redefined. Researchers must therefore adopt an iterative approach to theory development, ensuring that models remain relevant in the face of rapid technological evolution. This might involve periodic reassessments of established frameworks, longitudinal studies that capture technological evolution, and interdisciplinary collaborations that integrate insights from fields such as psychology, computer science, and ethics.

In summary, future research in the field of AI-driven marketing should adopt a multi-dimensional and interdisciplinary approach that addresses temporal, cultural, methodological, ethical, and technological dimensions. By exploring these diverse research directions, scholars can contribute to a more comprehensive understanding of how AI transforms customer experience and strategic marketing, while also providing actionable insights for practitioners. This robust research agenda will not only refine our theoretical models, but also guide the practical implementation of AI technologies in ways that are both effective and ethically responsible.

### 6.2. Other substantive avenues

#### 6.2.1. Cross-cultural factors

Another important avenue for future research is the exploration of cross-cultural differences in consumer interactions with AI. The current literature includes studies conducted in various regions. However, few studies explicitly compare how cultural factors moderate the effectiveness of AI features. Given that cultural norms and values significantly shape perceptions of technology (Mazaheri, Laroche, & Lyu, 2025), research that examines these differences could yield insights into how AI systems should be tailored to different markets. For example, the importance of anthropomorphic cues or the threshold for positive versus threatened awe might vary across cultures that differ in their attitudes toward technology and human interactions. Comparative studies across diverse cultural contexts using the whole range of cultural values, including the newly measured value of indulgence/restraint (Heydari et al., 2021), would not only enrich our theoretical understanding, but also provide practical guidance for multinational organizations seeking to implement AI strategies globally.

*Illustrative research questions:* “How do cultural differences influence

perceptions of AI warmth?” “What are the cross-cultural variations in the experience of positive versus threatened awe?”

#### 6.2.2. Emotional dynamics beyond awe

Exploring a broader spectrum of emotional responses—including empathy, trust, surprise, and even frustration—triggered by AI interactions; understanding how these emotions drive decision-making and long-term engagement.

*Illustrative research questions:* “What role do empathy and trust play in AI-mediated customer service?” “How do feelings of surprise or frustration affect continued usage of AI systems?”

#### 6.2.3. AI in crisis management and service recovery

Investigating the role of AI in managing crisis communications and service failures; determining how AI features such as warm responses and transparency can mitigate negative experiences and facilitate recovery.

*Illustrative research questions:* “How effective are AI-driven responses in restoring customer trust after a service failure?” “What crisis communication strategies can optimize AI disclosure during emergencies?”

#### 6.2.4. Conversational style and linguistic nuance

Assessing how the language, tone, and style of AI communication influence consumer perceptions and behaviors; focusing on how variations in conversational cues impact perceived authenticity and engagement.

*Illustrative research questions:* “How does a conversational tone in AI interactions affect customer satisfaction?” “What linguistic styles best convey empathy in automated service settings?”

#### 6.2.5. Problem of personalization

Evaluating the balance between personalized marketing benefits and the risks of over-targeting or filter bubbles; examining how transparent disclosure of personalization algorithms shapes consumer trust and perceived fairness. Moreover, research on the personalization-congruency nexus, particularly in the context of endorsement marketing, presents additional opportunities for exploration. The study on AI versus human endorsers has highlighted the importance of self-image congruency and functional congruency in shaping consumer purchase intentions. Future studies could extend this line of inquiry by investigating how these congruency effects interact with other variables, such as consumer personality traits, brand loyalty, cultural values, or situational factors like the economic climate. By deepening our understanding of these moderating factors, researchers can develop more targeted models that predict when and for whom different endorsement strategies will be most effective.

*Illustrative research questions:* “How does algorithmic transparency influence consumer perceptions of fairness in personalized marketing?” “What are the unintended consequences of over-targeted AI recommendations?”

#### 6.2.6. Digital literacy and consumer empowerment

Studying how consumer digital literacy shapes engagement with AI systems; exploring the moderating role of technological competence on the acceptance and interpretation of AI-driven interactions.

*Illustrative research questions:* “How does digital literacy influence the acceptance of AI in customer service?” “What training or information enhances consumers’ understanding of AI functionalities?”

#### 6.2.7. Emerging parasocial relationships in digital platforms

Investigating the formation and evolution of parasocial relationships with AI entities and virtual influencers; examining factors beyond the simple “assistant” versus “friend” dichotomy, and their implications for marketing effectiveness.

*Illustrative research questions:* “What new dimensions characterize

parasocial relationships with virtual influencers?” “How do evolving parasocial interactions influence purchase decisions across digital platforms?”

#### 6.2.8. Hybrid service models

Another critical direction is the investigation of hybrid service models that integrate AI and human intervention. Although some studies, such as the research on chatbots in banking, suggest that a combination of AI and human oversight is ideal, the optimal balance between automation and human input remains unclear. Researchers could explore how different hybrid models affect service quality, customer satisfaction, and operational efficiency. For example, studies might compare customer outcomes in fully automated systems versus systems where human agents intervene in complex or emotionally charged situations. Insights from such research would be particularly valuable for high-stakes industries such as finance, healthcare, and hospitality, where the interplay between technology and human judgment is critical for maintaining service standards.

#### 6.2.9. Ethical implications of AI

The ethical implications of AI in customer experience and marketing represent another critical research frontier. As AI systems become more pervasive, concerns about data privacy, algorithmic bias, and the potential for manipulation are increasingly relevant. Although several studies in the current synthesis touch upon transparency and authenticity, there is a clear need for research that rigorously examines the ethical dimensions of AI adoption (Sahut et al., 2023). Researchers could develop and test ethical frameworks or guidelines that help organizations balance the benefits of personalized, automated services with the protection of consumer rights. Such research might investigate how different disclosure strategies affect consumer trust or examine the long-term impact of algorithmic decision-making on consumer autonomy. By addressing these ethical challenges, future studies would contribute to a more sustainable and socially responsible deployment of AI technologies.

In summary, future research in the field of AI-driven marketing should adopt a multi-dimensional and interdisciplinary approach that addresses temporal, cultural, methodological, ethical, and technological dimensions. By exploring these diverse research directions, scholars can contribute to a more comprehensive understanding of how AI transforms customer experience and strategic marketing, while also providing actionable insights for practitioners. This robust research agenda will not only refine our theoretical models, but also guide the practical implementation of AI technologies in ways that are both effective and ethically responsible.

## 7. Conclusion

The integration of artificial intelligence into customer service and strategic marketing is reshaping the competitive landscape of contemporary business. The eleven studies synthesized in this article collectively demonstrate that AI is not merely an instrument for automation, but a multifaceted enabler of personalized, engaging, and trustworthy customer interactions. The nuanced insights provided by these studies—from the importance of AI warmth in service recovery to the complex interplay between transparency and content quality—offer both theoretical advancements and practical guidelines for harnessing AI’s potential.

By extending existing models and proposing an integrative framework, this synthesis contributes to a deeper understanding of how AI can be used to enhance customer experience while simultaneously addressing ethical, privacy, and authenticity challenges. The implications for both academic research and managerial practice are significant, as organizations continue to navigate the evolving digital landscape.

In conclusion, this article serves as a comprehensive resource that not only highlights the current state of AI in marketing, but it also sets



the stage for future research and innovation. By emphasizing the importance of human-centered design and ethical considerations, the synthesis offers a roadmap for developing AI applications that are both effective and sustainable in a rapidly changing marketplace.

#### CRediT authorship contribution statement

**Jean-Michel Sahut:** Writing – original draft, Methodology, Formal analysis, Conceptualization. **Michel Laroche:** Writing – review & editing, Conceptualization.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Acknowledgements

We gratefully acknowledge the strong support of the editor-in-chief and the Commissioning Editors, Prof. Dr. Paul A. Kirschner and Prof. Dr. Nic. Nistor, of the journal in making this special issue possible and the authors and reviewers for all the papers submitted.

#### Appendix - Table 1. Overview of studies on using artificial intelligence to enhance customer experience and develop strategic marketing

This table summarizes all papers included in the special issue. The titles, authors, section in which the paper is discussed as well as the main findings are summarized. Main findings are largely paraphrased and/or copied from the abstracts of the papers.

Title (Section)	Authors	Methodology	Main findings
Exploring the effect of AI warm response on consumer reuse intention in service failure (3.1)	Cuicui Wang Liangting Ni Bei Yuan Momo Tang	Method: Scenario analysis (ANOVA) Sample for 4 empirical studies: 60 people from China (S1a) + 87 people (S1b) + 203 people (S2) + 137 people (S3)	This study examined how AI warm reaction can improve service recovery after failure. Results from four trials indicate that AI strong warm reaction leads to enhanced consumer reuse intention in service recovery, with social presence mediating this relationship. Additionally, AI warm reaction had a substantial favorable recovery effect only in cases of low service breakdown severity. A significant compensatory effect of human involvement in service recovery was only observed after an AI low warm reaction, not a high warm response. The study expands on the usage of AI agents after service breakdown and highlights the potential of AI warm response in service recovery solutions. Additionally, AI service providers could improve the warmth of AI agents' responses to recover service failures and reduce human involvement.
AI-driven personalization: Unraveling consumer perceptions in social media engagement (3.2)	Tanawat Teepapal	Method: PLS (AMOS) Sample: 245 Thai respondents (on line survey)	This study reveals how AI-enabled customization affects consumer engagement in social media marketing. It uses an S-O-R framework to examine how AI stimuli affect customer perceptions of trust, privacy, usefulness, and engagement. Results support the premise that AI-enabled personalization enhances trust, privacy concerns, and perceived utility. Trust and perceived usefulness boost consumer engagement, while privacy concerns do not. Interestingly, AI-enabled personalization does not greatly impact customer engagement. The study found that customer perceptions, particularly trust and perceived utility, significantly contribute to favorable user-technology interactions. It expands the S-O-R framework to examine how AI affects consumer engagement, highlighting trust and perceived utility as key mediators. To improve social media marketing, firms should focus on trust-building, user experience, privacy, and customer-centricity. These insights offer direction for handling AI-enabled customization in social media marketing.
Online grocery shopping recommender systems: Common approaches and practices (3.3)	Laura Z.H. Jansen Kwabena E. Bennin Ellen van Kleef Ellen J. Van Loo	Systematic literature review	Food recommender systems for online shopping aid shoppers in making informed choices. These systems use acquired data to identify consumer preferences and needs, resulting in suitable product recommendations. Few studies have systematically analyzed the five stages of recommender systems for online grocery shoppers, despite their potential as a strategic marketing tool: (1) identifying recommendation goal, (2) acquiring consumer data, (3) computing, (4) evaluating, and (5) presenting recommendations. This study analyzes the progress made in offering grocery recommendations to consumers from 2018 to March 2023 based on 50 papers on recommender systems for online grocery buyers, contrasting prior research on recipe and meal recommendations aimed at inspiring cooking ideas. Research indicates that preference-based systems generally lack clear consumer data integration and consent for implicit data usage. Evaluation methods for advanced deep neural network models often exclude user feedback and general metrics, despite their growing popularity in the literature. This systematic literature analysis emphasizes the importance of consumer interaction in system and interface design for inclusive, user-centered grocery recommendation systems that enhance customer experience.

(continued on next page)

(continued)

Title (Section)	Authors	Methodology	Main findings
AI in the Spotlight: The impact of artificial intelligence disclosure on user engagement in short-form videos (3.4)	Hao Chen PP Wang Shuaikang Hao	Method: PLS-SEM (SmartPLS) Sample: 479 Chinese respondents	This paper examines how AI disclosure influences user engagement intention. The goal is to investigate the mechanisms and boundary conditions that affect the relationship between AI disclosure and user engagement. It used a heuristic-systematic paradigm to create a moderated mediation model and conducted an online experiment on the "Credamo" platform. Results show that AI disclosure positively affects user engagement intention, but may possibly decrease it by reducing perceived content quality. To reduce the negative influence on content quality, people should improve their perception of AI capabilities. It advances AI disclosure research and practical application of heuristic-systematic models, offering theoretical insights to AI literature. Additionally, it offer practical ideas for video content creators and publishers to enhance user interaction and content creation.
What makes an app authentic? Determining antecedents of perceived authenticity in an AI-powered service app (3.5)	Diem-Trang Vo Long Van Thang Nguyen Duy Dang-Pham Ai-Phuong Hoang	Method: SEM & FsQCA Sample for 2 empirical studies: 331 people from Vietnam (S1) + 309 people (S2)	Mobile applications using artificial intelligence are essential for user engagement due to their capacity for natural conversation and task execution. Despite consumers' pursuit of authenticity, few research have investigated the concept of authenticity with this non-human, human-like touchpoint. Study 1 examines the four characteristics of authenticity within the framework of AI-driven service applications. Employing regulatory engagement and parasocial interaction theory, Study 2 validates media richness, parental brand attitudes, and co-branding compatibility as determinants of perceived authenticity within the realm of AI-driven service applications. The six solutions derived from fsQCA results indicate that there are many, distinct, and equally effective combinations of media, brand, endorser, and personal elements that can lead to a heightened perception of authenticity. This study enhances the algorithmic experience literature by expanding the concept of "proper means" inside the AI-driven setting.
Are social media robot influencers credible? A cross-continental analysis in fashion context (3.6)	Patricia Baudier Elodie De Boissieu	Method: PLS-SEM (SmartPLS) Sample: 300 digital natives in international student programs in France	Chatbots commonly initiate brand interactions. Advertising companies and services are using human-like social media robot influencers (SMRs). Since the literature on SMR perceptions and use is lacking, this study uses source credibility theory to evaluate how perceptions affect attitudes. The effects of anthropomorphism on attitudes and purchase intentions for products backed by social media reviews and electronic word-of-mouth are researched. Moderation by gender and native continent is considered. A global sample of 300 digital natives (born post-1980) was surveyed using recognized scales using a quantitative approach. The findings emphasize trustworthiness, knowledge, physical attractiveness, content appeal, and anthropomorphic traits. However, influencers and followers' similarities do not affect SMR use. Anthropology strengthens source trustworthiness, and gender and home continent moderate it.
Autonomous technology in the marketplace: The impact of enjoyment on consumer responses (3.7)	Simoni F Rohden Carla Freitas Silveira Netto Lélis Balestrin Espartel	Method: Experiment Sample for 3 empirical studies: 251 European participants (S1) + 111 (S2) + 229 (S3)	The use of AI in smart retailing poses privacy concerns as it relies on user data. This study explores how technological enjoyment affects customers' willingness to reveal personal information, including the impact of perceived autonomy and psychological requirements. Using a survey and two single-factor tests, it found that consumers are more likely to share personal data when they enjoy smart retailing technologies like interactive kiosks, smartphone apps, and robots. Evidence suggests that risk perceptions and technology autonomy contribute to these findings. Additionally, perceived technology expertise favorably impacts consumer satisfaction. This research highlights the importance of enjoyment in reducing risk perceptions and encouraging self-disclosure in physical retail contexts. It stresses the need for marketers and policymakers to consider the potential negative effects of pleasant technology on consumer privacy. To better understand consumer behavior in smart retail environments, it examines the buffering effect of enjoyment on risk perceptions and its link with technology autonomy.
An assistant or a friend? The role of parasocial relationship of Human-Computer interaction (3.8)	Tiejun Qi Hongshen Liu Zhihui Huang	Method: Experiments Sample for 2 empirical studies: 101 people recruited on a campus of a University in China (S1) + 137 (S2)	The study investigated the impact of human-computer parasocial relationships on consumer perceptions using an experimental technique. The 'assistant' and 'friend' parasocial relationships, based on the "male trait" and "female trait" of AI robots, aim to enhance consumers' perception of competence and warmth through interaction and improve attitudes. Research indicates that perceived competence and warmth moderate the impact of "assistant" and "friend" parasocial relationships on consumer perceptions. Compared to the "friend" type of human-machine parasocial relationship, the "assistant" type increases consumers' perception of competence and warmth. Recent research suggests that gender features play a moderate effect in artificial intelligence robots. It expands the research on AI services marketing, shedding information on marketing strategy and AI intelligent design for organizations.

(continued)

Title (Section)	Authors	Methodology	Main findings
Chatbots in customer service within banking and finance: Do chatbots herald the start of an ai revolution in the corporate world? (3.9)	Gary Graham Tahir M Nisar Guru Prakash Prabhakar Royston Meriton Sadia Malik	Method: 45 Semi-structured interviews & 3 Case studies	This research aims to determine the effectiveness of chatbots in customer service, their impact on banking, and professionals' perceptions on their future impact. Using a qualitative approach, it discovered chatbots as a valuable tool for automating customer support and delivering high-quality service. Users and experts rate chatbots positively for simple activities, citing simplicity, 24/7 availability, and quickness as key factors in customer satisfaction. Due to their limited accuracy and reliability, chatbots need further development to effectively address complicated customer service issues. Chatbots have limited capabilities and cannot fully understand client requests. Thus, they cannot manage all customer inquiries without human assistance. However, chatbots have significant learning potential, and artificial intelligence offers undiscovered opportunities. This study examines present and prospective chatbot usage. Using these data, it creates an experimental framework for evaluating chatbots' dynamic customer service capabilities.
AI or human: How endorser shapes online purchase intention? (3.10)	Yang Song Litong Wang Zhiyuan Zhang Lubica Hikkerova	Method: ANOVA Sample: 210 Chinese people	Companies are increasingly using social media and inviting virtual influencers to endorse their products. The topic of whether AI endorsers can fully replace humans remains a challenge. This study aims to compare customer purchase intentions for products pushed by AI against real human endorsers. Two research indicate that AI endorsers can increase users' purchase intentions by promoting search items. Celebrity endorsements improve the marketing of experience products and increase consumers' purchase intention. Congruency perceptions moderate the impact of endorsers and product types on customers' purchase intentions, while self-image congruency mediates the impact of AI endorsers on search product buy intentions. Additionally, functional congruency influences celebrity endorsements' impact on experiential product purchase intentions. This study encourages organizations to evaluate product qualities and use effective endorsement marketing techniques.
"Positive" or "threatened"? The impact of the features in generative artificial intelligence on continued behavior (3.11)	Li Zhao Yun Xu ShengKai Zhou	Method: PLS-SEM (SmartPLS) Sample: 860 Chinese people	AI has provided marketers with new tools and insights, enabling efficient and personalized decision-making. This study examines the behavioral reasons behind the adoption of AI-generated content (AIGC) technology to offer marketers customized assistance. It focused on the impact of AIGC attributes (accuracy, competence, anthropomorphism, and interaction) and psychological mechanisms of awe on users' behavior. It used a mixed-methods approach, integrating quantitative data with qualitative research (user reviews). It found that the awe experience strongly impacts AIGC users' decision to continue using the device. Positive awe has a strong beneficial impact, while threatened awe has a smaller negative impact. The four features of AIGC—accuracy, competence, anthropomorphism, and interactivity—significantly influence users' continuous usage intention. Positive awe from competence, anthropomorphism, and involvement outweighed threatened awe, except for correctness. The study found that AIGC's distinctive features not only induce amazement but also increase consumers' intention to employ the technology.

Data availability

No data was used for the research described in the article.

References

Graham, G., Nisar, T. M., Prabhakar, G. P., Meriton, R., & Malik, S. (2025). Chatbots in customer service within banking and finance: Do chatbots herald the start of an AI revolution in the corporate world? *Computers in Human Behavior*, 165(April), Article 108570.

Qi, T., Liu, H., & Huang, Z. (2025). An assistant or a friend? The role of parasocial relationship in human–computer interaction. *Computers in Human Behavior*, 167 (June), Article 108625.

Rohden, S. F., Silveira Netto, C. F., & Espartel, L. B. (2025). Autonomous technology in the marketplace: The impact of enjoyment on consumer responses. *Computers in Human Behavior*, 168(July), Article 108647.

Song, Y., Wang, L., Zhang, Z., & Hikkerova, L. (2024). AI or human: How endorser shapes online purchase intention? *Computers in Human Behavior*, 158(September), Article 108300.

Vo, D.-T., Nguyen, L. V. T., Dang-Pham, D., & Hoang, A.-P. (2025). What makes an app authentic? Determining antecedents of perceived authenticity in an AI-powered service app. *Computers in Human Behavior*, 163(February), Article 108495.

Wang, C., Ni, L., Yuan, B., & Tang, M. (2025). Exploring the effect of AI warm response on consumer reuse intention in service failure. *Computers in Human Behavior*, 166 (May), Article 108606.

Ameen, N., Tarhini, A., Reppel, A., & Anand, A. (2021). Customer experiences in the age of artificial intelligence. *Computers in Human Behavior*, 114(January), Article 106548.

\* Baudier, P., & De Boissieu, E. (2025). Are social media robot influencers credible? A cross-continental analysis in a fashion context. *Computers in Human Behavior*, 162 (January), Article 108447.

\* Chen, H., Wang, P., & Hao, S. (2025). AI in the spotlight: The impact of artificial intelligence disclosure on user engagement in short-form videos. *Computers in Human Behavior*, 162(January), Article 108448.

Heydari, A., Laroche, M., Paulin, M., & Richard, M.-O. (2021). Hofstede's individual-level indulgence dimension: Scale development and validation. *Journal of Retailing and Consumer Services*, 62(September), Article 102640.

Jabeur, S. B., Ballouk, H., Arfi, W. B., & Sahut, J. M. (2023). Artificial intelligence applications in fake review detection: Bibliometric analysis and future avenues for research. *Journal of Business Research*, 158(March), Article 113631.

\* Jansen, L. Z. H., Bennin, K. E., van Kleef, E., & Van Loo, E. J. (2024). Online grocery shopping recommender systems: Common approaches and practices. *Computers in Human Behavior*, 159(October), Article 108336.

Lu, V. N., Wirtz, J., Kunz, W., Paluch, S., Gruber, T., Martins, A., et al. (2020). Service robots, customers, and service employees: What can we learn from the academic literature and where are the gaps? *Journal of Service Theory and Practice*, 30(3), 361–391.

- Manset, D., Hikkerova, L., & Sahut, J.-M. (2017). Rethinking the humanitarian model: From efficiency to resilience. *Gestion et management public*, 5(4), 83–106.
- Mazaheri, E., Laroche, M., & Lyu, D. (2025). Investigating the impact of brand relationship quality on brand loyalty in social commerce: A study on the moderating role of cultural values. *Journal of Digital & Social Media Marketing*, 12(4), 374–392.
- Mustak, M., Salminen, J., Plé, L., & Wirtz, J. (2021). Artificial intelligence in marketing: Topic modeling, scientometric analysis. *Journal of Business Research*, 124(January), 389–404.
- Nalbant, K. G., & Aydin, S. (2025). A bibliometric approach to the evolution of artificial intelligence in digital marketing. *International Marketing Review*. <https://doi.org/10.1108/IMR-04-2024-0132>
- Nazir, S., Khadim, S., Asadullah, M. A., & Syed, N. (2023). Exploring the influence of artificial intelligence technology on consumer repurchase intention: The mediation and moderation approach. *Technology in Society*, 72(February), Article 102190.
- Pizzolante, M., Borghesi, F., Sarcinella, E., Bartolotta, S., Salvi, C., Cipresso, P., ... Chirico, A. (2023). Awe in the metaverse: Designing and validating a novel online virtual-reality awe-inspiring training. *Computers in Human Behavior*, 148(November), Article 107876.
- Rangaswamy, A., Moch, N., Felten, C., van Bruggen, G., Wieringa, J. E., & Wirtz, J. (2020). The role of marketing in digital business platforms. *Journal of Interactive Marketing*, 51(August), 72–90.
- Sahut, J., Braune, É., & Lissillour, R. (2023). Viewpoint: A problematization of artificial intelligence ethics: Deliberative democracy versus agonistic pluralism. *Management & Prospective*, 40(6), 186–199. <https://shs.cairn.info/journal-gestion-2000-2023-6-page-186?lang=en>.
- Sahut, J., Dana, L., & Laroche, M. (2019). Digital innovations, impacts on marketing, value chain and business models: An introduction. *Canadian Journal of Administrative Science*, 37(1), 61–67.
- Sahut, J. M., Laroche, M., & Braune, E. (2024). Antecedents and consequences of fake reviews in a marketing approach: An overview and synthesis. *Journal of Business Research*, 175(March), Article 114572.
- Sahut, J. M., & Lissillour, R. (2023). The adoption of remote work platforms after the Covid-19 lockdown: New approach, new evidence. *Journal of Business Research*, 154 (January), Article 113345.
- Sahut, J. M., Schweizer, D., & Peris-Ortiz, M. (2022). Technological forecasting and social change introduction to the VSI technological innovations to ensure confidence in the digital world. *Technological Forecasting and Social Change*, 179(June), Article 121680.
- Song, M., Xing, X., Duan, Y., Cohen, J., & Mou, J. (2022). Will artificial intelligence replace human customer service? The impact of communication quality and privacy risks on adoption intention. *Journal of Retailing and Consumer Services*, 66(May), Article 102900.
- \* Teepapal, T. (2025). AI-driven personalization: Unraveling consumer perceptions in social media engagement. *Computers in Human Behavior*, 165(April), Article 108549.
- Vanhala, M., Lu, C., Peltonen, J., Sundqvist, S., Nummenmaa, J., & Jarvelin, K. (2020). The usage of large data sets in online consumer behavior: A bibliometric and computational text-mining – driven analysis of previous research. *Journal of Business Research*, 106(January), 46–59.
- Wirtz, J. (2020). Organizational ambidexterity: Cost-effective service excellence, service robots, and artificial intelligence. *Organizational Dynamics*, 49(3), 1–9.
- \* Zhao, L., Xu, Y., & Zhou, S.-K. (2025). “Positive” or “threatened”? The impact of the features in generative artificial intelligence on continued behavior. *Computers in Human Behavior*, (July), Article 108654.

Jean-Michel Sahut<sup>a,b,\*</sup>, Michel Laroche<sup>c</sup>

<sup>a</sup> IDRAC Business School, Lyon, France

<sup>b</sup> Paris-Saclay University, Guyancourt, France

<sup>c</sup> Concordia University, Montréal, Canada

\* Corresponding author. IDRAC Business School, Lyon, France.

E-mail addresses: [jeanmichel.sahut@idrac-bs.fr](mailto:jeanmichel.sahut@idrac-bs.fr) (J.-M. Sahut), [michel.laroche@concordia.ca](mailto:michel.laroche@concordia.ca) (M. Laroche).