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AI-Driven Customer Positioning and Perception: Strategies, Challenges and Insights

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Abstract: The current research aims to investigate the transformative impact of artificial intelligence (AI) on marketing. AI-driven marketing strategies are widely utilized in practice but their influence on customers is not always clear, leaving a glaring knowledge gap. Drawing on the Technology Acceptance Model, the current research analyses how AI-driven marketing strategies influence customer positioning and perception, with a particular emphasis on customer trust, engagement, and relevant ethical considerations. To maximize the ecological validity of data mining and analysis, we collect multi-layered data from renowned academic platforms, industry reports and consultancy records, in line with the institutional ethical guidelines. Research findings are meaningful in three ways. To begin with, while AI-driven marketing strategies offer promising tools for enhancing customer engagement, they also raise severe concerns related to transparency and ethics, such as threats surrounding data privacy, fairness, as well as the opacity of AI algorithms in implementation. Next, by comparing AI-driven and non-AI-driven marketing strategies, we can uncover the conditions under which AI promotes trust and improves the customer experience. Finally, research findings have advanced knowledge by providing evidence-based insights into the mechanisms through which AI affects customer perception. Overall, new research discoveries have benefited both entrepreneurs and marketing professionals, providing sensible insights to policy making (e.g., AI-driven marketing strategies) and ethical practices (e.g., ethical standards and procedures in marketing). Research limitation and suggestions for future research are discussed.

Keywords: AI-Driven; Customer Perception; Customer Positioning; Marketing Strategies; Technology Acceptance Model

1. Introduction

In layman's terms, Artificial intelligence (AI) is the technology that enables machines to perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-making. Artificial Intelligence is fundamentally reshaping how businesses engage with customers, particularly in terms of brand positioning and perception. As the digital marketplace becomes increasingly competitive, AI technologies such as predictive analytics, recommendation engines, and chatbots are enabling firms to harness large volumes of consumer data to deliver highly personalized experiences. This shift has allowed brands to not only streamline their operations but also build deeper, more meaningful connections with their target audiences [1,2]. Artificial intelligence is no longer just a helpful tool, it now plays a key role in marketing by helping businesses personalize messages quickly and keep

customers satisfied in a fast-moving, competitive world [3].

At the heart of this transformation lies the integration of several theoretical frameworks that help explain the dynamics of AI adoption and its impact on consumer behaviour. The Technology Acceptance Model (TAM), for instance, highlights how perceived usefulness and ease of use influence customers' willingness to engage with AI-driven tools. While many consumers embrace AI features like tailored recommendations, privacy concerns and ethical considerations often temper this enthusiasm [4,5]. Consumer decision-making theories suggest that AI helps simplify the purchasing process by reducing information overload. It offers targeted, confidence-boosting options that can increase customer loyalty and strengthen brand attachment [6]. However, this reliance on data-intensive personalization also brings to the forefront ethical dilemmas around transparency, fairness, and trust [7,8].

Despite growing interest in AI's role in marketing, existing literature tends to focus on its functional capabilities such as automation and data processing without thoroughly exploring its emotional and psychological impact on consumers [9]. There is a noticeable gap in understanding how AI-driven marketing strategies influence critical factors like customer trust, perceived credibility, and ethical engagement compared to traditional, human-led approaches [10]. While AI can improve engagement, over personalization or lack of transparency can reduce consumer trust and diminish brand credibility [11].

To address this gap, the current research offers a conceptual and comparative exploration of AI-driven versus non-AI-driven marketing strategies, with a particular focus on their influence on consumer trust, engagement, and ethical perception. By integrating established theoretical frameworks such as the Technology Acceptance Model (TAM) [12] and consumer decision-making theories [13], and drawing on recent empirical insights, the research aims to clarify how AI impacts key aspects of consumer behaviour, including perceived credibility, loyalty, and brand perception. This research adds to the customer positioning field by focusing on the emotional, ethical, and trust issues linked to using AI—topics that are often ignored in current marketing discussions [5,14]. In doing so, it provides not only a richer academic understanding of AI's strategic role in customer engagement but also practical guidance for marketers and entrepreneurs seeking to develop transparent, ethical, and consumer-centric AI strategies in an increasingly competitive digital landscape.

2. Literature Review

Artificial Intelligence is redefining customer engagement, trust, and personalization in marketing by enabling businesses to access and interpret vast amounts of consumer data. AI facilitates real-time decision-making, predictive analytics, and automation, all of which contribute to highly personalized marketing experiences [15]. These advances allow companies to deliver more relevant content, improve customer interaction, and enhance brand loyalty [12]. However, while these benefits are widely acknowledged, ethical concerns surrounding privacy, algorithmic bias, and transparency are also increasing [12].

Much of the current literature focuses on the technical aspects of AI data analysis, machine learning algorithms, and automation tools without adequately addressing its psychological and emotional effects on consumers. For instance, AI-driven personalization can improve customer satisfaction, but if it goes too far, it may make customers feel uncomfortable or manipulated, which can harm their trust in the brand [16, 17]. The lack of transparency around AI decisions further compounds this issue, as customers are more likely to trust brands that clearly communicate how AI is used in their interactions [18]. Recent studies have underscored the transformative role of AI in reshaping modern marketing strategies. Algorithm aversion explore how AI-driven personalization, customer journey automation, and predictive analytics have unlocked new sales potential for firms operating across diverse sectors. Similarly, another study [19] provide a comprehensive framework detailing the practical deployment of AI in marketing, covering the "what, where, and how" of AI applications in customer engagement, segmentation, and campaign optimization. These contributions reinforce the strategic relevance of AI marketing tools and justify the conceptual focus of this study.

Comparative studies between AI-driven and traditional marketing approaches reveal that AI enables dynamic segmentation and individual-level targeting, whereas traditional marketing relies heavily on static demographic segmentation and manual processes [20]. AI tools such as chat-bots, recommendation engines, and predictive models enhance scalability and responsiveness, offering deeper customer engagement and more efficient positioning [7]. Yet, these studies often overlook how such engagement influences customer perception at a psychological level [21].

Furthermore, while some frameworks like the Technology Acceptance Model (TAM) and Consumer Decision-

Making Models have been applied to explain AI adoption, they often fall short in explaining the ethical nuances and trust dynamics specific to AI-enabled marketing [8]. Research by [12] and [22] underscores the need for a more holistic understanding that includes trust-building, ethical responsibility, and customer empowerment. These studies hint at the potential of AI to reshape customer-brand relationships but do not sufficiently consolidate these insights into an integrated view [13].

This study reviews existing research to build a conceptual understanding. This approach is suitable because there is still no clear framework linking AI personalization, trust, and ethical marketing. Prior empirical studies have laid the groundwork by identifying isolated effects of AI in marketing, but a broader theoretical synthesis is needed to guide both academic understanding and practical implementation.

3. Methodology

The current research aims to investigate the characteristics of AI-driven marketing strategies and their potential influence on customer positioning and perception. Initially we researchers are keen to fulfil the research aim by utilizing primary data; However, we have quickly learnt from marketing practitioners that AI-driven marketing strategies are relatively new. To our knowledge, many companies are reluctant to share/release the details of their strategies. The reasons and concerns for such disclosure are business interest protection, commercial patents and market segmentation. Following the same logic, the current research does not rely on primary data collection but instead seeks to synthesize existing knowledge, a qualitative conceptual methodology is therefore employed. Details are outlined below.

The current section outlines the philosophical orientation, data gathering strategy, analytical approach, and quality control measures implemented throughout the research process. The current research adopts a conceptual research design, which is appropriate for theory development, exploration of emerging phenomena, and critical review of existing frameworks [7]. Conceptual research does not test hypotheses using empirical data but rather builds logical constructs through the integration of existing literature, insights, and viewpoints. This approach fits well because AI in customer positioning is still new, quickly changing, and involves many different fields. The overarching aim is to explore how AI technologies are transforming the way organizations position themselves in competitive markets, how this transformation influences customer perception and brand trust, and what ethical concerns emerge as a result. By engaging with scholarly literature, industry whitepapers, and thought leadership reports, the current research aims to contribute to theoretical advancement and strategic understanding.

The philosophical stance underpinning the current research is interpretivist in nature. Interpretivism recognises that meaning is socially constructed and context dependent [23]. In this case, understanding how customers perceive AI-driven brand interactions requires interpreting a range of perspectives academic, corporate, and consumer-based. Unlike research that focuses only on measurable facts, this study explores the complex and changing nature of customer views and ethics.

A multi-layered secondary data collection strategy was employed to ensure both the depth and breadth required for a robust conceptual exploration. The process began with a systematic literature review using clearly defined keyword searches across multiple academic and industry databases. Keywords such as "Artificial Intelligence and Customer Positioning," "AI in Marketing," "Customer Perception of AI," "Brand Trust and Automation," and "AI Ethics in Business" were used to identify relevant scholarly and practitioner-focused materials.

Searches were conducted through prominent academic platforms, including Scopus, Google Scholar, Web of Science, and ScienceDirect, to access high-quality, peer-reviewed literature. To complement the academic sources with practical, real-time insights, industry reports from globally recognized consulting firms such as McKinsey & Company, PwC, Gartner, Deloitte, and Forrester were also examined. Ethical dimensions were reinforced by reviewing guidelines from respected authorities such as the IEEE's Ethically Aligned Design and the European Commission's AI Ethics Guidelines (2019). To manage the breadth of data gathered, a screening protocol was implemented to assess each source for relevance and credibility. Documents were included only if they were published between 2016 and 2024, specifically addressed AI in the context of customer engagement, positioning, or trust, and discussed ethical or strategic implications of AI deployment. An initial pool of 138 documents was reviewed, from which 64 high-relevance sources were shortlisted for in-depth thematic analysis, forming the empirical backbone of this conceptual study.

To maintain methodological integrity, several quality control mechanisms were embedded throughout the pro-

cess: To begin with, multiple types of sources academic, professional, and regulatory were used to cross-validate information. For example, the impact of AI on customer trust was evaluated through peer-reviewed psychology journals, marketing studies, and consumer sentiment analysis from industry surveys (e.g., Salesforce State of Marketing Report, 2023). We checked each source for how recent, relevant, and unbiased it was. When we found opposing results like whether customers prefer people or chatbots, we explained these differences to show how customer views are still changing [24]. Moreover, to manage references and avoid data duplication, Zotero was used as a citation management tool. Each thematic insight was linked to its source, enabling traceability and citation accuracy. Versioning was maintained throughout to preserve research iterations.

To guide the synthesis and provide a structured understanding of how AI technologies influence customer positioning, an analytic framework has been developed (see **Figure 1**). This framework maps the dynamic interrelationship between AI strategy, ethical design principles, and customer perception dimensions, offering a cohesive view of how strategic AI deployment affects customer outcomes through an ethical lens. The framework shows that tools like chatbots and personalization engines affect how customers feel, especially when ethical values like fairness and openness are present [1]. These ethical dimensions shape how customers interpret and trust AI-driven interactions, ultimately influencing brand perception and loyalty [25,26]. This framework not only visualizes how strategic AI use and ethical implementation influence customer trust but also sets the stage for future empirical validation.

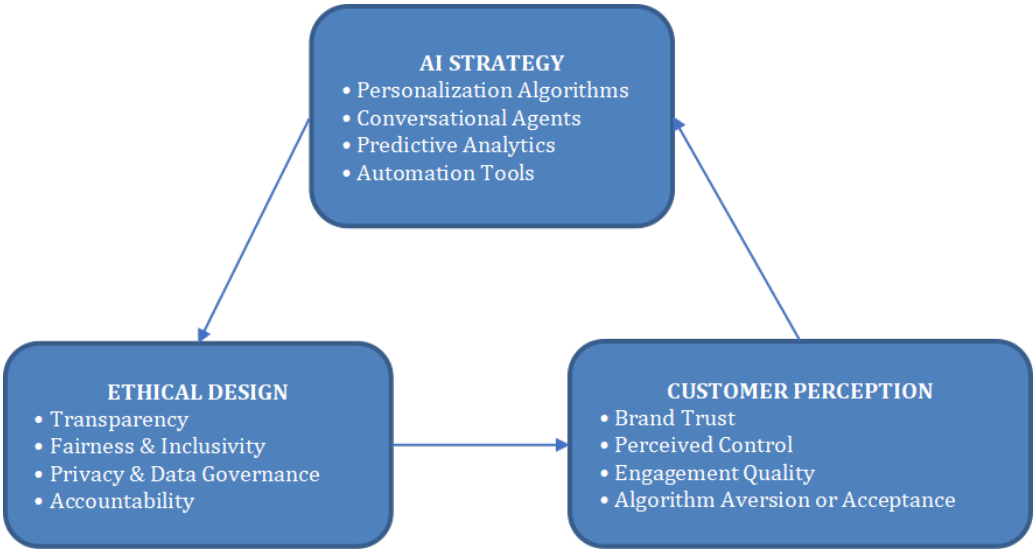

Figure 1. Analytic Framework.

Overall, although no primary data was collected from human participants. Ethical diligence was observed by representing the literature accurately, acknowledging biases in secondary sources, and giving due credit through meticulous referencing (Vancouver style format). While this conceptual methodology enables a rich exploration of AI's influence on customer positioning, it is important to acknowledge its limitations. Lack of primary data may limit empirical subjectivity in interpretation, which can introduce researcher bias. Dynamic AI evolution means findings may become outdated quickly. Nevertheless, the strength of this methodology lies in its ability to offer a theoretically grounded, holistically informed, and strategically relevant understanding of a complex, interdisciplinary topic.

4. Findings

The integration of artificial intelligence (AI) into marketing and customer engagement strategies is reshaping how organizations position themselves in an increasingly digital and competitive business landscape. This section combines insights from research, industry reports, and business examples to examine how AI affects customer positioning. The analysis is structured into four core themes. These are: (i) Strategic role of AI in customer positioning; (ii) Impact of AI on customer perception and brand trust; (iii) Ethical and strategic challenges in AI-based customer engagement; and (iv) AI and non-AI strategies. During the data analysis, each theme is identified and fully discussed

through sub-sections, accompanied by two summative tables to frame the research outcomes. To be specific, **Table 1** explains the AI tools and their contribution to customer positioning, whereas Table 2 depicts the factors shaping customer perception of AI-driven brands.

Table 1. AI tools and their contribution to customer positioning.

AI Tool	Strategic Function	Impact on Positioning
Machine Learning	Predictive segmentation and behavioural analysis	Enables micro-targeting and dynamic brand relevance
NLP & Sentiment Analysis	Emotion recognition from customer feedback	Helps in emotional positioning and messaging adaptation
Recommender Systems	Product/service suggestions based on user history	Enhances perceived personal relevance of brand
Conversational AI (Chat-bots)	Interactive brand communication and customer service	Builds brand voice and reliability
Computer Vision	Visual search, emotion detection from videos	Positions brand as innovative and customer-centric

4.1. Theme I: Strategic Role of AI in Customer Positioning

Customer positioning refers to the strategic activity of influencing how a company and its offerings are perceived in the minds of consumers, relative to competitors [27]. Traditionally, positioning has been guided by differentiation through price, quality, and brand image. AI changes the game by allowing personalized, real-time customer targeting, turning static strategies into flexible, data-based approaches [28]. As highlighted by Algorithm aversion, AI technologies such as recommendation engines, dynamic pricing algorithms, and chatbots have emerged as pivotal tools for enhancing the efficiency of marketing operations. Another study [19] further argue that AI not only optimizes traditional marketing functions but also introduces novel methods for segmenting and targeting customers based on behavioural data.

Instead of sticking to fixed brand images, companies now use AI insights to adjust their messages and products based on customer behaviour and preferences. Traditionally, customer positioning has been a strategic endeavour where businesses aim to occupy a distinct place in the consumer's mind, differentiating themselves from competitors through unique value propositions. However, the advent of Artificial Intelligence (AI) has revolutionized this landscape, enabling more dynamic, data-driven, and personalized approaches.

AI facilitates real-time analysis of vast datasets, allowing businesses to understand and predict customer behaviours with unprecedented accuracy. This capability transforms customer positioning from a static strategy into a fluid, responsive process that adapts to changing consumer preferences and market conditions.

4.1.1. AI-Driven Tools Enhancing Positioning Strategies

Several AI technologies are instrumental in redefining customer positioning. These are: (i) Predictive Analytics: By analysing historical data, AI can forecast future customer behaviours, enabling businesses to proactively tailor their offerings. For instance, predictive models can identify potential churn, allowing for timely interventions to retain customers [10]; (ii) Personalization Engines: These systems analyse individual customer data to deliver customized content, product recommendations, and marketing messages, enhancing relevance and engagement [15]; (iii) Behavioural Targeting: AI algorithms assess online behaviours to segment audiences and deliver targeted advertisements, increasing the efficiency of marketing campaigns [1]; (iv) Conversational AI: Chatbots and virtual assistants provide instant, personalized customer service, reinforcing brand identity and improving customer satisfaction; and (v) Computer Vision: In retail, AI-driven visual recognition helps in inventory management and enhances customer experiences through features like virtual try-ons.

Amazon Utilizes AI to recommend products based on browsing history, purchase patterns, and customer reviews, significantly boosting sales and customer satisfaction. Netflix Employs AI algorithms to analyse viewing habits and preferences, offering personalized content recommendations that enhance user engagement and retention. Sephora Integrates AI in its mobile app to provide personalized beauty advice and product recommendations, improving customer experience and loyalty.

Walmart, one of the world's largest retailers, has long been synonymous with value-oriented shopping. In recent years, Walmart has strategically adopted artificial intelligence (AI) to sharpen its competitive edge, particularly in how it positions itself to serve price-sensitive customers. As consumer behaviour becomes increasingly complex and digitally driven, Walmart's AI initiatives provide a compelling case of how technology can be used to personalize, automate, and optimize pricing and customer engagement.

At the heart of Walmart's AI strategy is its use of predictive analytics and machine learning models to dynamically adjust prices based on trends, competitor actions, stock levels, and customer needs. These models analyse vast datasets—including browsing history, purchase behaviour, and regional economic indicators—to fine-tune pricing strategies that appeal to budget-conscious consumers [29]. For instance, during holiday seasons or inflationary periods, Walmart's pricing engine can automatically lower prices on essential items or bundle them for higher perceived value, ensuring affordability and reinforcing its brand positioning as a cost leader.

Beyond pricing, Walmart also leverages AI-driven personalization engines to tailor product recommendations and promotional offers for individual customers. A shopper frequently browsing baby products may receive personalized discounts on diapers or formula, which not only meets their financial expectations but also builds loyalty. This tactic taps into the emotional aspect of brand trust, showing customers that Walmart understands and supports their financial priorities [14]. Walmart's acquisition of tech startup Jet.com further amplified its AI capabilities, allowing it to experiment with dynamic pricing models that incentivize customers to make cost-effective decisions, such as buying in bulk or selecting cheaper delivery options. This approach, known as "smart cart pricing," this method offers real-time discounts based on shopping habits, making saving money feel like a game [21].

Additionally, Walmart employs AI-driven chatbots and virtual assistants on its mobile app and website to answer customer queries instantly, recommend budget-friendly alternatives, and notify users about ongoing deals. These tools ensure consistent engagement and reduce customer friction, particularly for those seeking affordable solutions quickly. While these AI-driven strategies have enhanced Walmart's positioning among price-sensitive consumers, they are not without challenges. The reliance on customer data raises privacy concerns, requiring strict adherence to regulations like GDPR and CCPA. Moreover, ensuring algorithmic transparency and fairness is vital to avoid pricing discrimination, especially across different demographic groups. Nevertheless, Walmart's AI implementation demonstrates how technology can strengthen a brand's relationship with a specific customer segment price-sensitive shoppers through personalization, value delivery, and operational efficiency. By aligning AI tools with its core brand promise of "Everyday Low Prices," Walmart not only retains its traditional customer base but also attracts a new generation of digitally savvy, budget-conscious consumers. This case reinforces the broader implication that AI can humanize rather than just automate customer interactions if applied with ethical care and strategic clarity.

4.1.2. Challenges in Implementing AI for Positioning

Despite its advantages, integrating AI into customer positioning strategies presents challenges. These are: (i) Data Privacy Concerns: Collecting and analysing personal data raises privacy issues. Businesses must ensure compliance with regulations like GDPR and CCPA to maintain customer trust [30]; (ii) Algorithmic Bias: AI systems can inadvertently perpetuate biases present in training data, leading to unfair treatment of certain customer segments [31]; and (iii) Transparency and Explain-ability: The 'black box' nature of some AI models makes it difficult to understand decision-making processes, potentially eroding trust among consumers. As AI technologies continue to evolve, their role in customer positioning will become more sophisticated. Businesses that successfully integrate AI into their strategies, while addressing ethical and operational challenges, will be better positioned to meet the dynamic needs of their customers and gain a competitive edge (See **Table 1** for further details).

4.2. Theme II: Impact of AI on Customer Perception and Brand Trust

AI has significantly altered customer experiences by enabling more personalized, efficient, and engaging interactions. Personalized recommendations, instant customer service through chatbots, and tailored marketing messages contribute to a more satisfying customer journey, enhancing brand perception. A study by Vogue Business and Google found that AI-driven personalization in the luxury fashion sector led to increased consumer loyalty and spending, particularly among consumers who value individualized experiences [32]. From a different but relevant perspective, AI is found to enhance and undermine trust, depending on its implementation. On the one hand, when AI is used transparently and ethically, it can improve customer satisfaction and trust. For example, AI that provides clear explanations for recommendations helps customers feel more in control and confident in their decisions [25]. On the other hand, however, opaque AI systems that collect data without explicit consent or exhibit biased behaviours can erode trust. A survey by Omni sends revealed that over half of consumers are concerned about data mishandling by AI systems, highlighting the importance of transparency and data protection [26]. Interestingly, de-

spite the benefits of AI, some consumers exhibit 'algorithm aversion', preferring human judgment over algorithmic decisions, especially after witnessing AI errors. Factors contributing to this aversion include lack of transparency, perceived loss of control, and fear of dehumanization in customer service [25].

To mitigate algorithm aversion, businesses may enhance transparency which clearly explain how AI systems make decisions. For instance, businesses may maintain human oversight by ensuring that humans can intervene in AI-driven processes when necessary. Additionally, ethical deployment of AI is also essential to maintain brand trust. Common practice may include: (i) Data Ethics: Businesses must handle customer data responsibly, ensuring privacy and security; (ii) Fairness: AI systems should be designed to treat all customer segments equitably, avoiding discrimination; and (iii) Accountability: Companies should be accountable for AI decisions, providing avenues for customer feedback and redress. Overall, implementing ethical AI practices not only mitigates risks, but also enhances brand reputation and customer loyalty (See **Table 2** for further details).

Table 2. Factors shaping customer perception of AI-driven brands.

Factor	Description	Impact on Perception
Algorithmic Transparency	Clarity about how AI makes decisions	Increases trust, reduces perceived manipulation
Perceived Personalization	Customization based on customer data	Enhances satisfaction and brand relevance
Brand Reputation	Trustworthiness and history of the brand	Buffers AI-related concerns and builds loyalty
Human-AI Collaboration	Hybrid interactions (AI + human support)	Balances efficiency with empathy
Ethical Data Usage	Respect for privacy, consent, and data minimization	Strengthens brand integrity and customer advocacy

4.3. Theme III: Ethical and Strategic Challenges in AI-Based Customer Engagement

The integration of AI into customer engagement strategies raises several ethical concerns collecting and analysing personal data without explicit consent violates privacy rights and can lead to legal repercussions. AI systems trained on biased data can perpetuate existing inequalities, leading to unfair treatment of certain customer groups. The complexity of AI algorithms can make it difficult for customers to understand how decisions are made, leading to mistrust. Over-reliance on AI can diminish human agency, with customers feeling manipulated by algorithm-driven suggestions.

Governments and regulatory bodies are increasingly focusing on AI ethics the EU's AI Act aims to regulate AI systems based on their risk levels, imposing stricter requirements on high-risk applications. The Federal Trade Commission (FTC) emphasizes the importance of transparency and fairness in AI systems, warning against discriminatory practices. Organizations like the IEEE and the European Commission have developed ethical guidelines for AI, promoting principles such as accountability, transparency, and human-centric design.

Businesses must navigate the ethical landscape carefully to leverage AI effectively develop and adhere to ethical guidelines for AI deployment. Use AI models that provide clear, understandable outputs to enhance transparency. Involve customers, employees, and other stakeholders in discussions about AI use and ethics to regularly assess AI systems for biases and unintended consequences. Despite the challenges, ethical AI presents opportunities for businesses, companies that prioritize ethical AI can differentiate themselves in the market. Ethical practices build trust, leading to increased customer loyalty. Addressing ethical challenges can spur innovation, leading to the development of more responsible and effective AI solutions.

To sum up, the current section has explored the transformative impact of AI on customer positioning, examining its strategic, perceptual, and ethical dimensions. From enabling hyper-personalization and predictive insights to creating novel customer experiences, AI is not merely a technological add-on it is now a core strategic enabler of competitive advantage. Having said this, however, with power comes responsibility. Businesses must tread carefully in designing AI-driven positioning strategies that are transparent, inclusive, and human-centric. The future of customer engagement will likely be defined not just by how smart AI becomes, but by how ethically and empathetically it is deployed. Following the same logic, the next section will discuss implications for future research, strategic recommendations for practitioners, and a proposed framework for ethical AI-driven customer positioning.

4.4. Theme IV: AI and Non-AI Strategies

The integration of Artificial Intelligence (AI) into customer positioning and engagement has introduced significant differences compared to traditional non-AI strategies. While both AI and non-AI strategies aim to enhance

customer experience, improve brand loyalty, and boost sales, their approaches and outcomes vary widely. Understanding these differences, as well as the strength, weakness, and limitation of AI in interpreting human behaviour, is crucial for businesses seeking to balance technology with empathy. AI-driven strategies are characterized using machine learning algorithms, data analytics, and automation to process and respond to customer data in real-time. In contrast, non-AI strategies typically rely on traditional methods like human intuition, manual customer segmentation, and broad-market approaches to engage customers. The key differences between AI and non-AI strategies are outlined in three dimensions (see **Table 3** for summary). Details follow:

Table 3. The differences between AI and Non-AI in strategies.

Dimension	AI	Non-AI
Data processing and personalization	Great ability in analyzing massive data. Efficiency and accuracy oriented.	Manual to basic automation-based analysis. Responsive and supervision oriented.
Real-time customer interaction	24/7 instant customer support and service without human intervention, increasing customer satisfaction.	Human-driven service with fixed working hours. Slower in response but offering personalized attention.
Predictive insights and forecasting	Powered by the big-data, AI is capable of predictive analytics, helping businesses and systems optimize inventory, pricing, and marketing efforts.	Less accurate and slower; Relied on human analysis and intuition rather than data-driven insights. Less effective in dynamically adjusting to customer needs and market trends.

4.4.1. Dimension 1 – Data Processing and Personalization

AI: One of the key advantages of AI is its ability to analyse vast amounts of customer data in real-time and deliver highly personalized experiences. AI systems can process consumer behaviour data, identify patterns, and make recommendations tailored to individual preferences almost instantly. For example, AI-driven recommendation engines used by e-commerce platforms like Amazon suggest products based on a customer's browsing history and previous purchases [33]. This level of personalization enhances customer engagement and satisfaction by providing products and services that closely align with each customer's needs.

Non-AI: Non-AI strategies rely on more traditional, slower methods of customer segmentation. Marketers manually analyse data, categorize customers into broad segments based on demographics or past behaviour, and create generalized marketing campaigns. While effective in some contexts, this approach is less flexible and responsive compared to AI-driven methods.

4.4.2. Dimension 2 – Real-Time Customer Interaction

AI: AI-driven systems, such as chat-bots, provide 24/7 customer service, responding instantly to queries and concerns. For instance, companies like H&M use AI-driven chatbots to guide customers through the shopping process, offering product recommendations and addressing common questions without the need for human intervention [34]. This real-time interaction increases customer satisfaction by providing immediate assistance and support.

Non-AI: Non-AI strategies, such as human-driven customer service, rely on availability and working hours. While human agents can offer personalized attention, response times are typically slower, and customers may experience delays during peak periods. This slower response can lead to customer frustration, particularly when quick resolution is required.

4.4.3. Dimension 3 – Predictive Insights and Forecasting

AI: AI excels in predictive analytics, using historical data and machine learning models to forecast customer behaviour and trends. For example, AI algorithms can predict when a customer is likely to make a purchase or when they may abandon a shopping cart, enabling businesses to take proactive steps [35]. These insights help businesses optimize inventory, pricing, and marketing efforts.

Non-AI: Non-AI strategies rely on past experiences, intuition, and less sophisticated tools for forecasting. Predictive models are less accurate and typically slower, as they are based on human analysis and intuition rather than data-driven insights. This makes non-AI strategies less effective in dynamically adjusting to customer needs and market trends.

Up to now, we have learnt from the aforementioned analysis that both AI and non-AI strategies have their

characteristics, and each has its own merits. To further refine the analysis, we re-examine the research findings by scrutinizing the differences above, as well as the strength, weakness, and limitations of AI in interpreting human behaviour.

4.4.4. Key Strengths of Ai in Understanding Human Behaviour

Three points of strength are discovered. These are: (i) *Efficiency and speed*: One of the primary strengths of AI in customer engagement is its ability to process vast amounts of data quickly. AI algorithms can analyse complex data sets in seconds, providing businesses with real-time insights that are impossible to gather through non-AI methods. This enables businesses to respond to customer behaviour faster and more accurately, creating a seamless and efficient customer experience; (ii) *Personalization and customization*: AI excels in personalizing customer interactions by using data to deliver relevant recommendations, content, and offers. For instance, streaming platforms like Netflix use AI to suggest shows and movies based on viewing history, preferences, and even the time of day. This personalized experience significantly enhances customer engagement and satisfaction by catering to individual preferences, making customers feel valued and understood; and (iii) *Scalability*: AI-driven strategies are highly scalable, enabling businesses to extend personalized experiences to millions of customers simultaneously. Unlike non-AI strategies, which are resource-intensive and may require additional staff or manual intervention as customer bases grow, AI systems can handle large-scale personalization with minimal incremental cost.

4.4.5. Key Weaknesses and Limitations of AI in Understanding Human Behaviour

Three points of strength are discovered. These are: (i) Lack of emotional intelligence: While AI can analyse patterns in customer behaviour, it lacks the emotional intelligence that human agents bring to interactions. AI systems are limited in their ability to understand complex human emotions, sarcasm, or tone. For example, a chatbot may misunderstand a customer's frustration, leading to an impersonal or irrelevant response. Non-AI strategies, particularly human-driven approaches, excel in recognizing and responding to emotional cues, which are essential for building strong customer relationships; (ii) Bias and discrimination: AI systems are only as unbiased as the data they are trained on. If the data used to train AI algorithms contains inherent biases, such as racial or gender stereotypes, these biases can be perpetuated in AI-driven decision-making processes. This can lead to discriminatory practices in customer segmentation, pricing, or marketing strategies. For example, an AI system trained on biased hiring data may prioritize certain demographic groups over others, negatively impacting customer diversity and fairness. In contrast, non-AI strategies, while not immune to bias, can be more transparent and adaptable in addressing issues of discrimination through human oversight; and (iii) Lack of transparency and trust: AI systems, particularly complex machine learning algorithms, are often seen as "black boxes" by customers, making it difficult for them to understand how decisions are made. This lack of transparency can erode trust, especially if customers feel their data is being used without consent or if the outcomes of AI decisions are not explainable. Non-AI strategies, by comparison, may provide clearer insights into how decisions are made, especially when human agents are involved.

To sum up, the integration of AI into customer engagement strategies offers several advantages, including personalization, speed, and scalability. AI enables businesses to understand customer behaviour in real-time, delivering tailored experiences that were previously not possible. However, it also faces limitations, such as its inability to understand emotions, potential for bias, and lack of transparency. Non-AI strategies, while slower and less scalable, excel in areas where human empathy and judgment are critical. Balancing the strengths of both AI and non-AI strategies is essential for businesses aiming to build strong, trust-based relationships with their customers. As AI technology continues to evolve, it will be crucial for companies to address its limitations, ensuring that customer engagement remains both efficient and ethically sound.

5. Discussion

Research findings have illustrated a multifaceted view of how AI is reshaping customer positioning strategies, introducing both unprecedented opportunities and complex challenges. AI's ability to process and analyse massive datasets at scale allows for hyper-personalization and predictive analytics, marking a departure from traditional, human-centred marketing approaches. But this shift comes with trade-offs. AI is fast and accurate with data, but it

still struggles to understand emotions, social context, and cultural differences (see similar views in Ransbotham et al. [36,37]).

We have also learnt from research findings that there is a salient contrast between AI and non-AI strategies in their interpretive capacity. AI systems can identify behavioural patterns and make decisions based on probabilities and data trends. However, they often lack the qualitative discernment that human intuition provides particularly in emotionally sensitive or ethically ambiguous scenarios [38]. For instance, while AI chatbots can resolve customer inquiries instantly, their failure to detect sarcasm or frustration may lead to alienating rather than supporting the customer. This limitation underscores the importance of combining AI with human oversight in customer-facing roles.

Research findings have advanced knowledge of competitive advantage by claiming that the adoption of AI provides businesses respond quickly to market changes, giving them a competitive edge. Research findings are congruent with prior studies, indicating that the ability to deliver real-time, context-aware recommendations fosters deeper customer engagement and drives brand loyalty [39]. Nevertheless, findings also indicate that companies that rely solely on AI may risk homogenizing customer experiences, leading to a lack of brand differentiation. AI-driven automation may make interactions efficient but could also render them impersonal if not carefully balanced with human interaction. These new discoveries are aligning with the dyadic values of AI-empowered design and marketing strategies [35].

Ethically, the findings affirm growing concerns about data privacy, algorithmic bias, and a lack of transparency in AI systems. The 'black box' nature of AI, where decision-making processes are opaque, continues to fuel customer scepticism [36]. Biased training data further amplifies the risk of discriminatory outcomes, particularly when AI is used to determine pricing, content visibility, or customer segmentation [38]. Regulatory frameworks such as the EU's AI Act and FTC's AI fairness guidelines are crucial steps toward accountability, but organizations must also adopt internal ethical standards and actively involve stakeholders in AI strategy formulation [34,40].

Moreover, cultural and psychological variations play a significant role in how AI is perceived and trusted across customer segments. Consumers in high-context cultures, such as India or Japan, may value empathy and relationship-building in customer interactions, preferring human touchpoints over automated services. Conversely, customers in low-context cultures like the U.S. may prioritize efficiency, aligning more readily with AI-driven experiences [41]. We therefore suggest customer positioning strategies must be contextually aware, integrating AI in culturally sensitive ways.

From a strategic standpoint, the discussion emphasizes the need for hybrid models strategies that combine the data-processing strength of AI with the emotional and ethical discernment of human actors. Such models allow businesses to optimize operations while maintaining the relational and ethical integrity necessary for long-term success.

6. Limitation and Suggestions

In the current research, the absence of primary data (e.g., surveys, interviews, or experiments) means that the conclusions drawn are not empirically tested but are instead based on synthesized insights from existing literature. Although the qualitative synthesis provides a strong conceptual foundation, it does not necessarily capture real-time consumer perspectives or behavioural responses. Future studies may build upon the current research by conducting primary-data oriented projects to validate and/or compare the findings reported in the current research.

The characteristics of AI-driven marketing strategies are not fully investigated in the current research, so how several types of strategies affect customer positioning and perception is still unknown. We encourage future projects to continue this line of research, further examining the implications of different strategies on customers. One potential method is to collect primary data on the attitude and experience of customers in exposing to different AI-driven strategies. Finally, due to the rapidly evolving nature of AI technologies and consumer expectations, some findings may become outdated, and hence more investigation of up-to-date AI-driven marketing themes should be encouraged. The more research to be carried out, the more insights to be revealed.

7. Conclusions

The current research has provided a conceptual exploration into the transformative impact of AI on customer positioning, contrasting AI-driven strategies with traditional non-AI approaches. It highlights the superior capabilities of AI in personalization, scalability, and predictive analytics, while also acknowledging its shortcomings in emotional intelligence, cultural nuance, and ethical transparency. The key takeaway is not a binary choice between AI and non-AI strategies but rather a strategic integration of both. Organizations that harness AI's analytical prowess while embedding ethical guidelines and preserving the human element are likely to gain a competitive edge. This dual approach will not only enhance customer trust but also foster innovation that is socially and ethically responsible.

Future research should expand on this framework by empirically investigating customer reactions to hybrid engagement models across diverse cultural settings. As AI technologies become more emotionally responsive through affective computing, scholars and practitioners must explore how such developments affect customer loyalty, brand identity, and ethical risk. Ultimately, in an age where algorithms increasingly shape consumer experiences, the businesses that succeed will be those that humanize their AI using technology not to replace the human connection, but to enhance it with empathy, fairness, and transparency. AI will continue to evolve and reshape customer engagement, we therefore suggest future strategies prioritize explain-ability, ethical alignment, and human-centred design. Businesses should invest in Explainable AI (XAI) frameworks that make algorithmic decisions transparent and understandable to customers, thereby reducing scepticism and enhancing trust [27].

Finally, companies must adopt inclusive AI models that are regularly audited for bias and fairness, particularly in customer-facing applications like pricing, segmentation, and content delivery [1]. There is also a need to develop interdisciplinary teams comprising ethicists, engineers, marketers, and psychologists, ensuring that AI solutions are both technically robust and socially responsible [26]. From a regulatory standpoint, businesses should proactively align their practices with emerging AI governance frameworks, such as the EU's AI Act, rather than wait for enforcement to catch up. Finally, cross-cultural and cross-generational research is essential to understand how different demographic groups perceive AI-driven interactions. This would allow companies to tailor their customer positioning strategies more precisely and empathetically, addressing concerns related to algorithm aversion, emotional intelligence, and cultural sensitivity [29]. By embedding these forward-looking practices, businesses can turn AI from a disruptive force into a sustainable and trust-enhancing asset.

Author Contributions

Conceptualization, R.B. and K.C.; methodology, R.B. and K.C.; software: R.B. and T.-Y.W.; Validation, K.C. and C.-F.H.; formal analysis, R.B. and T.-Y.W.; Investigation, R.B. and T.-Y.W.; Resources, R.B.; data curation, R.B. and T.-Y.W.; writing—original draft preparation: R.B. and T.-Y.W.; writing—review and editing: K.C.; visualization, R.B. and T.-Y.W.; supervision, K.C. and C.-F.H.; project administration, R.B. and K.C.; funding acquisition, K.C. All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest

The authors declare no conflict of interest.

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