The Role of Generative AI and Anthropomorphism in Shaping Conversational Marketing: Creating a Matrix for Future Research

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Abstract: This research studies the interconnected relationship between Generative Artificial Intelligence and Anthropomorphism in the context of Conversational Marketing. The research highlights the transformative potential of Generative AI and the critical role of anthropomorphism in augmenting user experiences by tracing the evolution of Conversational Marketing in recent years. The paper introduces a novel matrix that highlights the impact of varying degrees of Generative AI and Anthropomorphism on Conversational Marketing outcomes. This matrix serves as an invaluable tool for both academics and industry professionals. It offers profound insights into potential synergies, as well as the challenges that arise from integrating different AI sophistication levels with varying degrees of anthropomorphic designs. The study emphasizes the importance of reaching a balance between the two elements to ensure optimal customer engagement and marketing strategy efficacy. Practical examples from each quadrant of the matrix reveal the real-world implications further, providing a comprehensive understanding of future research directions.

Keywords: Conversational marketing, Digital marketing, Generative AI, Anthropomorphism, Artificial intelligence

Introduction

In today's dynamic business environment, Conversational Marketing stands out as a transformative approach, reshaping the way businesses engage with their customers. Historically, marketing strategies were largely one-dimensional (Sinha & Singh, 2018) with businesses broadcasting their messages and customers passively receiving them. However, the rise of new technologies and changes in customer expectations caused a paradigm shift towards marketing methods that are more interactive and tailored to each person. Therefore, one of them is known as "conversational marketing," which places an emphasis, at its foundation, on real-time, meaningful dialogues between companies and their customers, with the goal of building deeper connections and more personalised experiences (Sotolongo & Copulsky, 2018; Israfilzade, 2021; 2023).

The primary goal of this study is to thoroughly investigate the interaction between Generative AI and Anthropomorphism and to decode their combined effects on the field of Conversational Marketing. The study is intended to first unpack the key principles and evolutionary path of Conversational Marketing. Following that, it intends to evaluate the significant role and influence that Generative AI has in developing Conversational Marketing strategies. The investigation concludes with the presentation of a comprehensive matrix that incorporates different levels of Generative AI and Anthropomorphism, providing a detailed perspective on their impact on Conversational Marketing practises. To achieve the aforementioned objectives, this study employs a comprehensive literature review methodology. By examining a myriad of scholarly articles, journals, and previous research works, the study aims to collate, analyze, and present a holistic view of the topic. The logic of the presentation follows a structured approach, beginning with an overview of Conversational Marketing, followed by an in-depth exploration of Generative AI and Anthropomorphism, and culminating in the introduction of a matrix that encapsulates the research's core findings.

In assumption, as businesses try to imitate deeper connections with their customers, understanding the potential and challenges of integrating Generative AI and Anthropomorphism in Conversational Marketing becomes paramount. This research endeavours to shed light on this complex interplay, offering valuable insights to marketers, managers, and business strategists alike.

Literature Review

Integration of Generative AI and Anthropomorphism has emerged as a critical area of study in the rapidly developing landscape of Conversational Marketing. This is due to the fact that anthropomorphism and AI are both used to model human behaviour. The literature review section of this paper conducts a thorough analysis of previous academic research to better understand the development and present status of Conversational Marketing. This analysis highlights the transformative impact of Generative AI, which has changed the boundaries of customer engagement by enabling dynamic and real-time dialogues. Meanwhile, the present review expands into the notion of Anthropomorphism in technology, a concept with the objective of reducing the difference between digital interfaces and human interaction by empowering machines with characteristics similar to human qualities. Therefore, the Literature Review not only places the study in its proper context within the larger academic discourse, but it also provides a practical and theoretical foundation for constructing the matrix that will map out the complex interplay that exists between these two essential components of conversational marketing.

Impact and Development of Conversational Marketing

Historically speaking, the major approach of operation for marketing tactics has been a broadcast approach (Sinha & Singh, 2018). Companies provided promotional content, and customers were primarily passive users of this information across a variety of mediums, including newspapers, television, radio, and even the earliest digital venues. Personalization and engagement with customers on a one-to-one level were not possible with this business model, even though it helped companies reach a large audience. Despite this, the advent of the digital age and the proliferation of social media platforms have brought about a fundamental shift in the marketing industry, which is now frequently referred to as Digital Marketing (Sinha & Singh, 2018; Puri, 2020). Customers in the modern day are more knowledgeable than ever before (Pilelienė et al., 2022) and now anticipate experiences that are not just personalised but also interactive. They want interactions that go in both directions, in which their questions and concerns are swiftly addressed and in which their opinions and suggestions are taken into consideration.

This paradigm shift resulted in the creation of new methods and strategies, one of which came to be known as *conversational marketing* (Israfilzade, 2021; 2023). Conversational marketing emphasizes the significance of direct and meaningful discussions between firms and customers. The concept of *"dialogue"* is at the very core of what is referred to as *"conversational marketing."* Even while it would appear obvious given its name, the relevance of this straightforward idea cannot be underestimated. This is especially true when compared to the context of traditional marketing methods, which tend to overload consumers with a wave of information, oftentimes without their request.

Conversational marketing represents a customer-focused, dialogue-based approach that aims to engage customers through significant, real-time interactive conversations (Sotolongo & Copulsky, 2018; Cancel & Gerhardt, 2019; Israfilzade, 2021; 2023). Straying from traditional, one-directional marketing communications, it aims to interact with customers by leveraging the power of conversation to convey information, resolve inquiries, and collect feedback, consequently establishing deeper, more personalized connections with customers. It should come as no surprise, given that we are now living in the digital age, that the majority of these contacts take place on instant messaging platforms. These platforms are the modern touchstones of online discourse.

Therefore, it is possible to comprehend what exactly constitutes conversational marketing. Here is a definition of conversational marketing that can be discerned from the current study:

> "Conversational marketing is a contemporary marketing approach predicated on real-time, personalized one-to-one interactions across diverse channels, facilitating collaborative brand and product experiences and thereby strengthening customer relationships and enhancing overall customer experience."

This slightly modified definition was initially introduced in the study *"Conversational Marketing as a Framework for Interaction with the Customer"* by author Israfilzade (2021).

Conversational marketing, on the other hand, makes use of the potential of interactive dialogues to do more than just relay information; rather, it deeply engages customers by facilitating a dynamic exchange in which they move from being passive receivers to active participants. Interactions become more meaningful and personalised, and as a result, more engaging (Zhang et al., 2018; Shumanov & Johnson, 2021). This can be accomplished by tailoring conversations to the specific context of each individual customer. For instance, artificial intelligence chatbots are able to handle multiple customer conversations at the same time (Harbola, 2021), which enables them to provide instant responses and individualised experiences to a wider audience.

These interactive exchanges serve as a rich resource for businesses to gain crucial insights into their customers' needs, preferences, and challenges. Such knowledge becomes instrumental in refining product offerings, crafting personalized marketing strategies, and enhancing customer service delivery (Hu & Sun, 2023). Consequently, conversational marketing exceeds the conventional concept of marketing that solely focuses on product or service promotion. It fosters understanding and engagement with customers, addresses their concerns, and cultivates relationships, rendering it an influential tool for customer relationship management (Van Doorn et al., 2017).

According to the author (Israfilzade, 2021; 2023), conversational marketing is an innovative and forward-thinking strategy that fundamentally revolves around six key principles (Table 1) that have been formulated specifically for the purpose of this research. To begin, it takes a customer-centric approach, which centres on addressing customer needs and interests in order to provide a curated and individualised experience. It also highlights the importance of real-time engagement, which involves promptly interacting with customers in order to significantly improve both their level of satisfaction and their experience as a whole. In addition, this method of marketing encourages interactive dialogues, which helps to foster communication in both directions and active participation from customers, rather than limiting customers to the role of passive receivers of marketing messages.

Table 1. Key principles of conversational marketing

PRINCIPLES OF CONVERSATIONAL MARKETING	DESCRIPTION
CUSTOMER-CENTRIC APPROACH	This strategy focuses on meeting the needs and interests of the customer, with the goal of providing a personalised experience.
REAL-TIME ENGAGEMENT	Conversational marketing highlights the importance of responding quickly to customers, which improves their experience and satisfaction.
INTERACTIVE DIALOGUES	This approach encourages two-way communication and active customer involvement, shifting away from passive receipt of marketing messages.
DATA-DRIVEN INSIGHTS	Businesses can gain valuable insights into customer behaviour, preferences, and pain points by engaging in conversations with them.
OMNICHANNEL PRESENCE	Conversational marketing makes use of a variety of platforms, including social media, email, and chatbots, to interact with customers wherever they feel most at ease.
BUILDING LONG-TERM RELATIONSHIPS	The approach is aimed not only at immediate sales but also at building long-term relationships with customers, fostering stronger connections and loyalty.

Source: Created by author

Another basis of this strategy is gathering data-driven insights, with businesses using conversations to understand their customers' behaviours, preferences, and challenges better. Further, conversational marketing is characterized by its omnichannel presence, leveraging various platforms - from social media and email to chatbots - to interact with customers wherever they're most comfortable. Lastly, instead of solely aiming for immediate sales, this approach focuses on building long-term relationships with customers, nurturing stronger connections and loyalty over time.

Furthermore, it is also essential to differentiate between conversational marketing and conversational commerce. Nevertheless, in this context, an essential distinction needs to be made: conversational marketing and conversational commerce are not the same thing, but they are interdependent on one another. The term "conversational commerce" describes the combination of messaging apps and online purchases (Piyush,

Choudhury & Kumar, 2016). This refers to the growing practice of communicating with businesses through instant messaging and chatting applications such as Facebook Messenger, WhatsApp, and WeChat. On the other hand, conversational marketing goes beyond merely doing business; rather, it focuses on developing brand resonance, increasing visibility, and drawing attention to a product or service. Eventually, it becomes evident that conversational commerce represents an essential part of conversational marketing, rather than separate marketing tactics.

Generative AI in Conversational Marketing

Generative AI, a subset of Artificial Intelligence, is revolutionizing the domain of conversational marketing with its ability to create new, original content from existing data (Sotolongo & Copulsky, 2018; Kulkarni et al., 2019; Mayahi & Vidrih, 2022; Liu et al., 2023). This branch of AI utilizes advanced machine learning techniques to innovate content creation, offering a leap forward from the conventional AI focus on data interpretation and decision-making (Goodfellow et al., 2014; Houde et al., 2020; Dwivedi et al., 2023).

Unlike its traditional counterparts, Generative AI ventures into the realm of creativity, generating a variety of content responses tailored to user interactions (Israfilzade, 2023). It encompasses a range of models such as Generative Adversarial Networks (GANs), Variational Autoencoders (VAEs), and Transformer-based models like the GPT series from OpenAI (Liu et al., 2023). Each of these models brings its unique capabilities to the table; GANs, for instance, are adept at crafting lifelike images, whereas GPT models excel in producing text that closely mimics human writing (Radford et al., 2019; Houde et al., 2020; Liu et al., 2023).

In the realm of conversational marketing, the indication of Generative AI is most evident in the development of advanced chatbots or virtual assistants. These AI-powered chatbots, unlike their rule-based counterparts, are capable of understanding, learning from, and dynamically responding to human input. They utilize natural language processing and machine learning techniques to interpret customer queries, learn from past interactions, and generate human-like responses in real-time (Nuruzzaman & Hussain, 2018; Harbola, 2021; Ooi et al., 2023).

The incorporation of Generative AI in conversational marketing yields multiple benefits. Firstly, it enables round-the-clock customer service. AI-driven chatbots can instantly and continuously handle customer inquiries, offering an enhanced level of customer service that isn't limited by time zones or human capacity (Harbola, 2021; Umamaheswari & Valarmathi, 2023; Dwivedi et al., 2023). Secondly, Generative AI promotes personalization at a scale previously unattainable. By learning from each interaction and remembering customer preferences, it can tailor responses to individual customer needs, significantly enhancing the customer experience.

Looking into the future, Generative AI holds immense potential to transform conversational marketing strategies even further. As the technology continues to evolve, we are likely to see the development of more advanced models capable of handling more complex conversations, understanding context with greater precision, and generating more relevant and engaging responses. Additionally, Generative AI is beginning to synergize with other technologies, such as augmented reality (AR) and virtual reality (VR), promising more immersive and interactive conversational experiences (Dwivedi et al., 2023, Ooi et al., 2023).

Nevertheless, the rise of Generative AI also brings along several challenges and ethical considerations. Issues surrounding data privacy, the transparency of AI mechanisms, and the potential for AI-generated misinformation or deception need to be conscientiously addressed. As we progress further into this exciting frontier, it will be critical to navigate these challenges effectively to truly tap into the potential of Generative AI in conversational marketing.

Anthropomorphic Generative AI on Conversational Marketing

Anthropomorphism is a term that comes from the Greek terms *anthrōpos* (ἄνθρωπος), which means "human," and *morphē*, which means "shape" or "form." This term refers to more than only the practice of attributing life to nonliving things, which is known as animism. To be involved in anthropomorphism, one must move beyond the practice of describing actions, whether imagined or observed. Scholars from a wide variety of fields have pointed out for a very long time that humans tend to view nonhuman agents as being humanlike (Horowitz & Bekoff, 2007; Epley, Waytz & Cacioppo, 2007; Murphy, Gretzel & Pesonen, 2019; Wan & Chen, 2021; Crolic

et al., 2022; Makany et al., 2023). Anthropomorphic explanations have been called into question as to whether or not they have an appropriate place in scientific discourse, and whether or not anthropomorphism can account for phenomena ranging from religious belief to successful marketing campaigns.

Non-human entities or objects are *anthropomorphized* by giving them human-like traits, intentions, emotions, or behaviours (Epley, Waytz, & Cacioppo, 2007). The idea underpins human cognition and is often unconscious (Guthrie, 1993). Anthropomorphism is used in artificial intelligence and conversational marketing to create conversational agents that feel human and improve user experience.

The emergence of Anthropomorphic Generative AI has facilitated groundbreaking opportunities in the field of conversational marketing. Anthropomorphic conversational agents are assuming more complex roles in influencing the dynamics of customer-business interactions, surpassing their initial function as mere facilitators of communication. Anthropomorphic Generative AI demonstrates exceptional proficiency in the creation and sustenance of human-like engagements within the field of conversational marketing. According to Van Doorn et al. (2017), this distinctive characteristic provides notable benefits for marketers by enabling them to enhance customer relationships and establish a competitive advantage within the market.

Moreover, the learning and evolution capacity of Generative AI enables the creation of more personalized, relevant, and valuable dialogues. By amassing and analyzing data from user interactions, these AI systems can fine-tune their responses to better mirror human conversation patterns. This feature paves the way for more dynamic and robust dialogues, allowing marketers to engage customers in more meaningful and impactful conversations.

However, blending anthropomorphic design with Generative AI in conversational marketing is not without hurdles. AI systems that closely imitate human conversation can potentially lead to user dissonance and perceptions of deception. Over-promising with anthropomorphic design can generate high user expectations, and any failure to meet these expectations can lead to dissatisfaction (Ciechanowski et al., 2019, Makany et al., 2023; Hu & Sun, 2023; Ooi et al., 2023).

Achieving an optimal balance in the utilisation of anthropomorphism in conversational marketing holds significant importance. A comprehensive strategy is required that goes beyond simply providing AI systems with human-like characteristics. In order to mitigate potential divergence or misrepresentation arising from exaggerated AI capabilities, the design and competencies of conversational agents must be aligned with user expectations. According to Jakesch et al. (2019), the utilisation of a suitably anthropomorphized artificial intelligence (AI) has the potential to enhance the quality of interactions, elevate user satisfaction, and facilitate a more efficient marketing strategy.

The primary difficulty lies in finding a balance between integrating desirable human-like characteristics and effectively managing user expectations with regard to the capabilities of the artificial intelligence system. The presence of an excessive amount of anthropomorphism can lead to the formation of unrealistic expectations, whereas an insufficient amount can result in the AI appearing impersonal and mechanical. Therefore, effectively managing this intricate equilibrium is crucial for harnessing the complete capabilities of Anthropomorphic Generative AI in the context of conversational marketing.

Creating a Conversational Marketing Matrix for Intersections of AI and Anthropomorphism

In the evolving landscape of digital marketing, the interplay between technology and user experience continues to intensify. Conversational marketing, a concept gaining traction, harnesses the power of interaction to offer a more personalized and responsive approach to the consumer. Instead of the traditional one-way bombardment of information (Sinha & Singh, 2018), this paradigm shift facilitates a two-way conversation, tailoring the marketing strategy to the needs and preferences of individual users. The conversation is mediated via advanced technologies, with Generative AI at the forefront. Yet, with great power comes an intricate web of design challenges and considerations. The degree to which these AI systems mimic human behaviours and characteristics - a quality termed "anthropomorphism" - plays a pivotal role in shaping user experiences and perceptions.

This research expands into the intersection of Generative AI and anthropomorphism, providing a comprehensive analysis of their collective impact on conversational marketing. Through the construction of a matrix that

incorporates different levels of both factors, our objective is to define the possible domains of involvement and non-involvement. The purpose of this analytical framework is to provide guidance to marketers, designers, and business strategists on the optimal utilisation of AI technologies in interactive marketing contexts. It is referred to as "Implications of Generative AI and Anthropomorphism Levels on Conversational Marketing" and is presented in Table 2. The matrix not only illustrates the qualitative variations in interactions among various AI-anthropomorphism combinations but also emphasises the inherent advantages and disadvantages associated with each. As individuals navigate through the matrix, they will acquire insights into the impact of various combinations on user satisfaction, trust, and the overall effectiveness of conversational marketing strategies.

Table 2. Implications of generative ai and anthropomorphism levels on conversational marketing

	Low Anthropomorphism	High Anthropomorphism
Low Generative AI	Conversational Marketing Impact: Limited engagement due to lack of personalization and human-like interaction. Effective for simple, transactional interactions.	Conversational Marketing Impact: Increased engagement due to a relatable, human-like interface. Risk of disappointment if AI fails to deliver human-like responses.
High Generative AI	Conversational Marketing Impact: Improved engagement due to personalized responses. Potential disengagement if responses seem inauthentic or machine-like.	Conversational Marketing Impact: Highly engaging and dynamic conversations are possible. Risk of discomfort or dissonance if AI appears too human-like or fails to meet high expectations.

Source: Created by author

The presented table, entitled "The Implications of Generative AI and Anthropomorphism Levels on Conversational Marketing," displays a matrix that classifies the potential implications of different levels of anthropomorphism and Generative AI sophistication on conversational marketing. The table has been divided into four quadrants, with each quadrant denoting a distinct combination of anthropomorphism and AI power.

The combination of Generative AI and Anthropomorphism is of significant importance in influencing these digital dialogues. Generative AI presents the possibility of dynamic and personalised interactions, and the incorporation of anthropomorphism can augment the relatability and attractiveness of these digital entities. However, the combination of these factors does not consistently lead to the most effective level of involvement. The visual representation provided in Figure 1, entitled 'The Conversational Marketing Matrix: Intersections of AI and Anthropomorphism', presents a classification of different combinations of these elements into four distinct quadrants.

Figure 1. The conversational marketing matrix: intersections of ai and anthropomorphism

The four quadrants in this framework represent distinct interaction styles, which emphasise the interplay and potential challenges that arise from different degrees of AI complexity and anthropomorphic design. The subject

matter has been divided into four discrete quadrants, with each quadrant symbolising a distinct combination of the abovementioned variables.

1. *Digital Clerk* **(Low Generative AI & Low Anthropomorphism):** These digital tools are specifically designed for simple tasks or to offer fundamental information without any additional features or embellished details. The interaction with these entities is straightforward and utilitarian, lacking any additional elements of individualization or anthropomorphic qualities.

2. **Humanoid Echo** (Low Generative AI & High Anthropomorphism): These entities represent the influential forces operating behind the scenes. Lacking a humanoid form, they make up for this deficiency through their remarkable intelligence. Chatbots have the ability to offer responses that are tailored and relevant to individual users. However, their lack of human-like characteristics can occasionally create a sense of detachment or excessive mechanisation for certain users.

3. **Almost Human (High Generative AI & High Anthropomorphism):** This quadrant depicts chatbots or AI tools that have been painted with a human-like facade, mirroring predetermined responses. Although they may exhibit human-like characteristics upon initial observation, their interactions are limited by predetermined patterns. Individuals may initially be attracted to the familiar and relatable visual presentation of the system, but over time, they may experience a sense of dissatisfaction due to the system's limited ability to engage in adaptive conversation.

4. **Silent Genius (High Generative AI & Low Anthropomorphism):** These entities have both a human-like appearance and an advanced capacity for dynamic interaction, representing the highest level of technological complexity in the field of conversational marketing. In addition, they are capable of carrying on natural-sounding conversations. They have the ability to learn, adapt, and communicate in complex ways. On the other hand, in order to avoid the *uncanny valley* effect (Mori et al., 2012), a careful balance is required. The design and communication strategy need to take measures to ensure that the human-like presentation does not give unreasonably high expectations for human-level understanding and responses.

When engaging in the field of conversational marketing, it is essential for businesses to determine the alignment of their strategies within the various quadrants. By employing this strategy, individuals can enhance their methods, optimising them to enhance user engagement, satisfaction, and overall effectiveness.

Theoretical matrix and categorizations offer a systematic framework for comprehending the dynamics of Anthropomorphism and Generative AI. However, practical examples serve to anchor these concepts in concrete scenarios, thereby providing a clear perspective on their implications in real-world interactions. These examples not only provide illumination on the various outcomes that arise from different combinations of anthropomorphism and AI sophistication, but they also offer valuable insights for businesses seeking to leverage the potential of conversational marketing. Through careful analysis and introspection of these tangible examples, professionals in the fields of design, marketing, and artificial intelligence can enhance their ability to effectively navigate the intricate interplay between user expectations and technological advancements.

Consequently, the following are illustrative examples corresponding to each quadrant:

1. **Low Generative AI & Low Anthropomorphism**: An example of this quadrant is a simple customer service chatbot that responds to specific keywords with pre-set responses. These bots can handle straightforward queries such as "What are your operating hours?" efficiently but are unable to engage in complex, dynamic conversations.

2. **Low Generative AI & High Anthropomorphism**: Early versions of virtual assistants like Apple's Siri or Amazon's Alexa fit this category. They feature human-like voices and personalities to enhance user engagement but initially had limited generative capabilities, responding to a narrow set of commands which could lead to user disappointment when the interaction did not meet the human-like expectation set by their appearance.

3. **High Generative AI & Low Anthropomorphism**: consider an advanced analytics platform that utilizes machine learning to interpret customer data and provide actionable insights. This system, while not designed to interact with customers directly in a human-like manner, leverages its generative AI capabilities to analyze customer behaviour, predict trends, and personalized recommendations for the

marketing team. It operates with a high level of intelligence, sifting through vast amounts of data to generate reports and strategies that marketers can use to enhance their campaigns. However, it does so without any anthropomorphic characteristics—it doesn't have a name, voice, or persona, and interactions with it are strictly data-driven and functional, focusing on efficiency and accuracy over relatability.

4. **High Generative AI & High Anthropomorphism:** envision a sophisticated virtual customer service agent, like an evolved version of a digital assistant, that not only understands and processes natural language but also recognizes emotional cues and adapts its responses accordingly. This agent, equipped with a name, a back-story, and even a customizable avatar, engages with customers through voice or text, providing assistance that feels remarkably human. It can handle complex tasks such as resolving customer complaints, offering personalized shopping advice, or managing bookings, all while maintaining a conversational tone that mimics human warmth and understanding. Its generative AI capabilities allow it to learn from each interaction, continuously improving its ability to converse, empathize, and provide solutions that feel both personal and intuitive, thereby enhancing the customer experience significantly.

The aforementioned examples serve to underscore the diverse implications of anthropomorphic design and generative artificial intelligence (AI) capabilities in relation to the efficacy and user perception of AI systems within the context of conversational marketing. Every combination of factors presents a unique set of opportunities and challenges that necessitate thorough consideration during the design and implementation phases.

Conclusion

The study on the combination of Generative AI and Anthropomorphism in Conversational Marketing has revealed a novel approach to facilitating communication between customers and businesses. The research demonstrates that conversational marketing encompasses more than mere real-time conversations, as it also involves the establishment of authentic and intimate relationships. The inclusion of Generative AI in this paradigm enhances its capabilities, enabling dynamic and contextually responsive interactions that closely resemble human conversations in terms of depth and authenticity.

Conversational marketing, with its focus on real-time, meaningful conversations, is a powerful way for businesses to build deeper, more personal relationships with their customers. In an age where individuals want real interactions, this approach is a beneficial change from traditional, one-dimensional marketing methods. When you add Generative AI to this mix, Conversational Marketing becomes even more powerful. Generative AI's ability to generate unique, context-relevant content allows businesses to engage customers in dynamic conversations that change in real-time, just like how people talk to each other. This not only makes the user experience better, but it also makes it possible to make marketing plans that are better informed and more specific.

On the other hand, anthropomorphism makes these AI-driven interactions more familiar and easy to understand. Businesses may reduce the technological gap and make technology easier for people to use and more meaningful to them by making conversational agents that have human-like traits. But, as the research shows, it's important to find an appropriate balance. Overemphasising or underemphasizing anthropomorphic attributes can cause issues. This shows how important it is to take a sophisticated approach The introduction of a matrix that shows the multifaceted connection between Generative AI and Anthropomorphism is one of the most important parts of this research. This matrix is divided into four separate quadrants, each of which shows a different way that these variables interact with each other:

1. **Digital Clerk**: Basic AI functionalities with minimal human-like attributes, focusing on task-oriented interactions.
2. **Humanoid Echo**: Advanced AI capabilities combined with moderate anthropomorphic traits, offering a blend of efficiency and relatability.
3. **Silent Genius**: High AI capabilities with minimal anthropomorphic features, emphasizing intelligence and problem-solving without overt human-like characteristics.
4. **Almost Human**: A near-perfect blend of advanced AI functionalities and pronounced anthropomorphic traits, closely emulating human interactions in depth and nuance.

Each quadrant has a roadmap that shows the potential benefits, challenges, and strategic implications of its own combination. This gives businesses a full set of instructions for how to customise their Conversational Marketing strategies.

In summary, the combination of Generative AI and Anthropomorphism in Conversational Marketing anticipates a novel phase characterised by enhanced and more significant engagement with customers. Given the ongoing evolution of technology and the changing expectations of consumers, it is crucial for businesses to maintain flexibility and utilise the findings of this research in order to develop marketing strategies that are not only efficient but also highly impactful. The early stage of Conversational Marketing promises vast possibilities for its future development.

Recommendations

The swift evolution of Generative AI and Anthropomorphism in conversational marketing underscores the need for ongoing research. It's essential to understand the long-term consumer impacts, adapt to cultural differences, address ethical concerns, and keep up with technological progress. Future studies should focus on these areas to ensure that AI-driven marketing is both effective and responsible, considering the implications for consumer trust, industry practices, and the broader societal context. Future research recommendations for the paper on Conversational Marketing could be as follows:

1. **Cross-Disciplinary Studies**: Future studies could benefit from a cross-disciplinary approach, integrating insights from cognitive psychology, human-computer interaction, and data science to deepen the understanding of user engagement with anthropomorphic AI in conversational marketing.
2. **Longitudinal Impact Analysis**: There is a need for longitudinal studies to assess the long-term effects of interactions with high anthropomorphic and generative AI systems on consumer behaviour, trust, and brand loyalty.
3. **Cultural Variability in AI Reception**: Exploring how different cultures perceive and interact with varying degrees of anthropomorphism in AI could provide valuable insights for global marketing strategies.
4. **Ethical Considerations**: Further research should be directed towards the ethical implications of using highly anthropomorphic AI in marketing, including issues of privacy, consent, and the potential for manipulation.
5. **Technological Advancements**: As AI technology evolves, continuous research will be required to understand the capabilities and limitations of new generative AI models in conversational marketing.
6. **Industry-Specific Applications**: Investigating the effectiveness of generative AI and anthropomorphism in various industries could reveal sector-specific best practices and challenges.
7. **Consumer Segmentation**: Future research could look into how different consumer segments respond to varying levels of AI sophistication and human likeness, potentially leading to more targeted marketing approaches.
8. **AI and Emotional Intelligence**: Studies focusing on the integration of emotional intelligence in generative AI could provide insights into enhancing customer satisfaction and engagement.
9. **Impact on Employment**: Research could also explore the impact of anthropomorphic generative AI on the marketing job landscape, identifying new roles and skills that will be in demand.
10. **Measurement Metrics**: Developing new metrics to measure the effectiveness of conversational marketing strategies that employ generative AI and anthropomorphism would be beneficial for the field.
11. **User Experience Design**: There is a scope for research into the design of user experiences that seamlessly integrate high levels of AI and anthropomorphism without causing user discomfort or the uncanny valley effect.
12. **AI Governance**: With the increasing use of AI in marketing, there is a need for research into governance models that ensure responsible use of AI, including transparency, accountability, and fairness.

By examining these domains, future research can enhance our comprehension of the role of Generative AI and Anthropomorphism in Conversational Marketing, and direct the advancement of more efficient, ethically conscious, and customer-focused marketing technologies.

Scientific Ethics Declaration

The author declares that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the author.

Acknowledgements or Notes

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To cite this article: