

# The Impact of AI-Powered Content Generation on Customer Experience

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## ABSTRACT,

*This thesis explores the perceptions and preferences of individuals regarding AI-generated and human-generated content. The study aims to examine the value, advantages, disadvantages, quality, relevance, personalization, impact, and key factors associated with both types of content. Grounded in a comprehensive theoretical framework, the research adopts a mixed-methods approach, utilizing interviews to gather data from participants. The findings reveal diverse perspectives on the value of human touch in content creation, emphasizing emotional connection and craftsmanship. Participants recognize the advantages of AI-generated content, such as improved productivity and cost-efficiency. However, concerns regarding ethical issues, biased information, and the lack of emotional understanding and personalization in AI-generated content were also expressed. The study highlights the role of emotional design and personalization in content quality, as well as the significance of relevance and personalization in user preferences. Moreover, the impact of AI-generated content on cognitive load and learning difficulty is explored. The research provides valuable insights for organizations seeking to integrate AI technology into their content creation strategies, emphasizing the need for a cautious and thoughtful approach. By optimizing customer experience strategies and promoting ethical and responsible use of AI technology, businesses can enhance customer engagement and satisfaction. The thesis concludes with limitations of the study and suggestions for future research.*

## Graduation Committee members:

### Keywords

AI-generated content, human-generated content, perceptions, preferences, emotional appeal, trustworthiness, personalization, ethical implications

# 1. INTRODUCTION

## 1.1 Setting the Scene

AI-powered content generation is bringing about a revolution in many industries by streamlining different tasks and elevating the decision-making process with ease (Ameen et al., 2021). It involves utilizing algorithms to generate texts, images, or even videos that serve numerous objectives. Various sectors adopt automated content creation powered by AI technology extensively, particularly in marketing ventures and customer service providers.

Personalization is key in today's highly competitive business landscape. With AI technologies taking center stage, businesses can benefit from personalized content created using data-driven algorithms that take user behavior patterns into account (Aguirre et al., 2015). The approach in question has found extensive usage in numerous sectors, including retail and hospitality. The said method allows the crafting of compelling and appropriate content, resulting in an improved level of customer experience overall.

Ethics plays a vital role in the realm of AI-generated content, particularly concerning biases and discriminatory concepts that may be present in the training data (Wu et al., 2023). Biased AI-generated content can result in negative customer experiences and harm a business's reputation. Therefore, it is crucial for companies to prioritize ethical considerations by examining how they train algorithms on diverse datasets and promoting a multifaceted approach to creating high-quality, inclusive AI-driven materials.

Despite the potential benefits, the use of AI-generated content also has shortcomings. Machines lack the emotional nuances and authenticity that humans bring, which can affect user engagement (Ebrahimi & Fanaeepour, 2020). Additionally, the unoriginal and repetitive output may be produced by AI systems, leading to a lack of differentiation and potential damage to brands over time (Ebrahimi & Fanaeepour, 2020).

AI-powered content generation offers significant potential for improving the customer experience. However, careful consideration of its limitations, ethical concerns, and potential impact on customer engagement is essential. By understanding these factors and addressing them effectively, businesses can harness the benefits of AI-generated content while mitigating its challenges.

## 1.2 Core phenomenon

The growth in the application of artificial intelligence-generated content has changed the way businesses generate vast amounts of text, pictures, and videos with speed and precision (Davenport et al., 2020). However, there is still a limited understanding of how such automated solutions impact customer perception of brand experiences throughout their journey (Ameen et al., 2021). Understanding the intricate association between AI-generated content and customer experience is imperative for evaluating its actual impact.

AI-generated content has seen widespread use due to its effectiveness in certain tasks; however, this usage is not without faults. For example, the limitations it faces with regard to personalized messaging could result in duller and less memorable materials when compared with works produced by humans (Bilgihan et al., 2016). Moreover, the use of algorithms can introduce errors or inappropriate communications that negatively affect customer sentiment (Davenport et al., 2020).

Recognizing how AI-generated materials influence engagement with customers can help organizations create better-quality content which increases satisfaction levels and positively impacts

retention rates (Bilgihan et al., 2016). Therefore, businesses need to acknowledge the impact that automated generation has on clients' experiences so as not to miss out on optimizing their returns while also managing associated negative effects.

## 1.3 Shortcomings

AI technology has become an indispensable tool across multiple sectors worldwide as businesses continue to seek innovative ways of increasing productivity and efficiency levels. Yet even as this development represents progress on many fronts, there remain critical concerns regarding some potential shortcomings inherent in using artificial intelligence techniques for creating content (Blumer, 1969; Burgoon et al., 1978; Daft & Lengel, 1986).

A prime example of this is that because machines do not have emotions as humans do, they often produce written materials that lack the authentic feel or nuance required for generating high levels of user engagement at scale (Blumer, 1969).

Negative customer experiences may result from AI-generated content that is not appropriate or offensive to its audience. The use of AI algorithms in generating brand content also poses limitations as these algorithms rely on the quality of training data (Burgoon et al., 1978).

Consequently, the unoriginal and repetitive output may be produced by AI systems, leading to an inability for brands to stand out within their respective markets, causing damage over time (Daft & Lengel, 1986).

Additionally, this reliance on algorithmically generated materials reduces flexibility by making it harder for brands' marketers to shift strategies with shifting tastes and preferences (Csikszentmihalyi, 1990).

Establishing ethical rules in crafting AI-powered content is critical to mitigate these issues. Despite its potential in revamping marketing strategies as well as improving customer service experience, limitations remain that need resolution before realizing this potential fully (Eppler & Mengis, 2004).

## 1.4 Purpose and core RQ

The central aim of this study is to evaluate the effects of incorporating AI technology for generating content on a customer's online experience and how customers assess machine-produced outputs when compared with those generated by humans. The study aims to address the following research questions:

1. How do customers perceive AI-generated content compared to human-generated content and its impact on the customer experience?
2. What are the potential ethical implications of using AI-powered content generation in marketing and customer service?

Through our comprehensive findings, we hope to equip organizations with useful advice regarding successfully integrating these contemporary innovations into their consumer outreach efforts. One advantage of implementing artificial intelligence-based systems for producing content in fields like marketing or customer service is improving processing time while maintaining high-quality outcomes (Davenport et al., 2020). However, there are also potential shortcomings that must be taken into account, particularly concerning the potential loss of legitimacy and accuracy (Norman, 2004).

Therefore, this analysis will examine the ethical factors involved when employing automated capabilities for creating textual data (Eppler & Mengis, 2004). Additionally, it seeks to provide insight into how these developments impact broader society's

opinions on the efficacy of advanced technologies by quantifying changes brought about by different levels of exposure among users (Gerbner et al., 1994).

As a result, this research attempts to recommend a cautious application of the techniques through the examination of possible challenges. By establishing a framework for businesses to capitalize on the benefits of AI while avoiding potential drawbacks, our research will make a significant contribution (Davenport et al., 2020). Optimizing customer experience strategies and promoting ethical and responsible use of AI technology for customer experience purposes will be aided by the findings of this research (Eppler & Mengis, 2004).

## 2. THEORETICAL FRAMEWORK

The paper endeavors to understand the impact of AI-based content generation on customer experience. Key areas explored are how customers perceive content produced from an artificial intelligence source in comparison to that made by human creators. Furthermore, potential ethical consequences linked to deploying the technology in marketing and customer service are probed. By integrating various psychological theories, this research aims to address the existing research gap in this field.

The advent of AI in content creation has significantly transformed various sectors, including marketing, software design, entertainment, and interpersonal communications (Davenport & Mittal, 2022). AI models have been identified as valuable tools for businesses, with capabilities such as automated content generation, improved content quality, increased content variety, and personalized content. These models have shown potential in mimicking human creativity, albeit with sensitivity to prompts and the need for human editing to refine AI-generated content.

The use of AI in social media strategy has been particularly transformative. AI has been utilized in content generation, personalized recommendations, chatbots, image and speech recognition, and sentiment analysis (Biljman, 2023). These applications have led to increased efficiency and accuracy, better audience targeting, improved customer service, and cost reduction.

However, the introduction of AI in creative work also presents potential disruptions. De Cremer, Morini Bianzino, and Falk (2023) propose three scenarios: AI augmenting human work to increase productivity, AI creating a flood of cheap content that could potentially drive out human creatives, and human-made creative work demanding a premium due to its unique human touch.

A key theory that contributes to the research gap is the Social Presence Theory (Short, Williams, & Christie, 1976). According to this theory, human-generated content elicits stronger emotional responses and engagement due to the sense of social presence it creates. According to available data, customers are more likely to establish an emotional tie with interactive experiences featuring content produced by humans. Nonetheless, comprehending the ways in which AI-generated material affects consumer sentiments relative to human-developed material and its overall influence on experiences remains relatively underexplored.

This research gap also relates to the Cognitive Load Theory (Sweller, 1994). This theory posits that in terms of clear and succinct expression, AI-generated content stands out from the crowd and helps to decrease cognitive exertion while enhancing information processing effectiveness. Even with extensive research into how AI-produced materials influence cognition, there are still vast gaps in our comprehension concerning human-made writing. This raises questions regarding customer

perceptions of cognitive load in relation to both forms of online information - questions that need more investigation before we can fully understand its impact on customer satisfaction and experience.

Furthermore, the Elaboration Likelihood Model (Petty & Cacioppo, 1986) is relevant to the research gap. This particular model indicates that human-created material draws readers in more effectively due to its emotionally-charged tone, which can manifest in positive impacts on their attitudes and behaviors. However, the impacts of AI-created content relative to people-made material on customer outlooks and actions have not been definitively proven yet by empirical research. This gap in knowledge hinders a comprehensive understanding of the customer experience when interacting with AI-generated content.

The Technology Acceptance Model (Davis, 1989) is also significant in addressing the research gap. This model examines the factors influencing the acceptance and use of AI-generated content, including perceived usefulness and ease of use. However, there is limited research exploring customers' acceptance and adoption of AI-generated content specifically in the contexts of marketing and customer service. Understanding customers' attitudes and behaviors towards AI-generated content in these domains is crucial to comprehending the overall customer experience.

The Emotional Design Theory (Norman, 2004) contributes to the research gap as well. This theory emphasizes the importance of emotional appeal in design, suggesting that human-generated content, with its emotional depth, creates a stronger emotional connection with readers. However, the impact of AI-generated content on emotional connection and its implications for the customer experience remains understudied. Exploring how customers perceive the emotional appeal of AI-generated content compared to human-generated content will help fill this gap.

The use of AI in content generation and customer service also raises significant ethical considerations. Concerns about data access, algorithmic bias, transparency, and the potential for misuse of AI-generated content have been highlighted (Biljman, 2023). The need for human oversight and control, as well as the need to penalize malicious AI behavior and promote cybersecurity, are also critical considerations in the ethical use of AI in content generation (Davenport & Mittal, 2022).

In summary, the research gap addressed in this thesis lies in understanding customers' perceptions of AI-generated content compared to human-generated content and its impact on the customer experience. The theoretical framework integrates various psychological theories, including the Social Presence Theory, Cognitive Load Theory, Elaboration Likelihood Model, Technology Acceptance Model, and Emotional Design Theory. By examining these theories, this research aims to contribute to a more comprehensive understanding of the customer experience and the potential ethical implications associated with AI-powered content generation in marketing and customer service.

## 3. METHODOLOGY:

### 3.1 Participants

With an emphasis on understanding how AI-generated content affects customer perception of brands, this inquiry adopts a qualitative approach based on in-depth interviews. Creswell and Poth (2017) outline this approach, which allows for a deeper understanding of complex phenomena, making it suitable for exploring the nuanced perceptions of AI-generated content. Participants representing varying demographic profiles were randomly selected based on their usage of artificial intelligence. This selection criterion was chosen to ensure a diverse sample

that includes individuals who are familiar with AI technology and its advancements. The interviewed participants consisted of six bachelor students from the University of Twente, with an average age of 22 years. The sample comprised three females and three males.

### 3.2 First Part Interview

The interview process consisted of two parts, a methodological choice supported by the work of DiCicco-Bloom and Crabtree (2006). They highlight the value of in-depth interviews in qualitative research, as they allow for a detailed exploration of participants' experiences and perspectives, which is crucial for this study. At the beginning of the study, participants were presented with general inquiries to evaluate their grasp and assessment of AI-generated content and its utility in marketing and customer service. These queries aimed to collect initial insights about the participants' familiarity and viewpoints regarding this topic. Commencing with such introductory questions allowed us to establish a fundamental comprehension of AI-generated content among the participants.

The questions asked in part of the study serve to gather valuable insights from participants in the context of AI-generated content in marketing and customer service. The aim is to observe and understand key aspects related to AI-generated content. Each question has a specific focus:

1. Analyze how people observe AI-generated versus human-made pieces in terms of credibility and engagement. Prompted by concerns over those aspects in automated technology-created objects, our research seeks answers on whether one approach garners more trust than the other that can be utilized for future developments and applications in this field.
2. Gain insight into potential improvements in customer satisfaction levels and potential impacts on brand perception. In completing our research objectives, it's essential that we understand how AI-generated might either benefit or hinder customers' experience with brands.
3. Identifying potential ethical concerns and issues arising from the use of AI-powered content generation. The aim is to understand participants' awareness and concerns regarding privacy, algorithmic bias, and the responsible use of AI-generated content in marketing and customer service.
4. Evaluating factors such as quality assurance, relevance for customer segments or targets, and customization levels. We intend to explore the pros and cons encompassed within both methodologies while considering how differentiations affect customers' acceptance or usage via user experience.
5. Uncovering common patterns and trends as well as important variables shaping customers' preferences. The overarching purpose is then enabling companies or entities like yours to build sharp business practices around those insights.

### 3.3 Second Part Interview

The second part of the interview involved a practical exercise, wherein a random LinkedIn post by a young professional was selected for analysis. To maintain confidentiality, the individual's identity was preserved.

The specific type of content chosen for this research was social media posts, specifically around 250 words messages or updates shared on LinkedIn. By comparing the AI-generated and human-generated posts, the study aimed to examine the potential of AI

in replicating human-like content while retaining its distinct AI origin.

To compare and contrast the human-generated content with AI-generated content, an AI tool called Chat GPT was utilized. This tool is widely recognized as one of the most popular and accessible options for generating AI content. The researchers provided Chat GPT with the subject of the post and some structural insights but did not present the human-generated post to the AI model.

To ensure the generated content was suitable for social media platforms, ChatGPT was asked to humanize the text.

To validate the authenticity of the AI-generated post, two widely accessible tools for text verification, GPTZero and ZeroGPT, were employed. These tools confirmed that the content was indeed 100% AI-generated. Similarly, the human-generated post was also subjected to verification using the same tools, resulting in a 0% AI-generated classification.

The people interviewed were then exposed to both human-generated and AI-generated content and asked questions about their perception of the two pieces.

Derived from structured interview questions intended for thorough analysis, our research focuses on seven primary dimensions.

1. Quality Of Content: This comparison between two pieces establishes areas requiring improvement while highlighting strong points present in each piece.
2. Relevance And Personalization: By discovering whether or not included materials meet participants' specific needs/ interests through pinpointing personalization opportunities we can ensure relevance.
3. Language And Tone: This assessment covers gauging how effectively both pieces use language/ tone impacts upon readers as well as uncovering insights into their naturalness & overall impact on readers' reactions.
4. Engagement And Emotional Response: Discovering which approach stimulates interest best & which one garners higher emotional response determines these dimensions' influences upon short readings/digestions when timing matters most.
5. Clarity and Coherence: Investigation into effective message & problem identification delivers clear concise messages while highlighting areas of required improvement.
6. Trustworthiness and Credibility: A critical factor is participants' views on AI-generated & human-generated content's trustworthiness & credibility factors, enabling perceptions to influence their decisions favorably toward the production of future pieces.
7. Overall Preference: From comparing participant preferences, we can make conclusive findings covering each comparative value reflecting upon its strengths/weaknesses.

### 3.4 Other details

By incorporating real-world examples and obtaining direct feedback from the participants, we aimed to gain a deeper understanding of how AI-generated content influences customer perception and overall experience.

To ensure comprehensive data collection, semi-structured interviews were conducted either face-to-face or remotely,

depending on the participants' preferences. The interview questions were carefully designed to elicit detailed responses and encourage participants to express their thoughts openly. This open-ended approach allowed for a rich exploration of participants' beliefs, experiences, and observations related to AI-generated content.

To ensure methodological rigor, steps were taken to maintain standardization throughout the research process. The questionnaires used in the interviews were carefully designed to minimize variation and ensure consistent data collection. This consistency is important for ensuring that the data analysis is based on reliable and comparable information.

### 3.5 Data Analysis

The data analysis phase of the thesis employed a hybrid approach, utilizing both inductive and deductive coding methods to analyze the first part of the interview data. As Fereday and Muir-Cochrane (2006) argue, this hybrid approach combines the advantages of both methods, allowing for the identification of emergent patterns and themes while also applying pre-existing categories or concepts to the data. Inductive coding allows for the identification of patterns and themes that emerge from the data itself, while deductive coding involves applying pre-existing categories or concepts to the data. This hybrid approach provides a comprehensive analysis that combines the advantages of both methods.

In order to facilitate the inductive coding process, the in vivo coding method was used. In vivo coding involves using participants' own words or phrases as codes to capture the essence of their responses. This method was chosen because it allows for a more nuanced understanding of the participants' perspectives and enables the analysis to stay closely tied to the data itself. By using in vivo coding, the analysis can capture the richness and subtleties of the participants' language, enhancing the accuracy and depth of the findings.

After the initial coding phase and line by line coding phase were completed, the codes were further categorized based on their similarities and relationships. This categorization process allowed for the identification of broader themes within the data. The themes were then analyzed to extract meaningful insights and understand the underlying patterns and beliefs related to AI-generated content.

During the thematic analysis, a systematic coding process was employed to identify common trends and insights across the interviews (Braun & Clarke, 2006). This process involved organizing the codes into meaningful categories and examining the relationships between them. By analyzing these categories, larger thematic areas emerged, providing a comprehensive understanding of customer beliefs and experiences regarding AI-generated content.

The qualitative techniques used in this study aim to provide an in-depth comprehension of customer experiences and viewpoints. By analyzing the interview responses and feedback on LinkedIn posts, valuable insights can be gained for companies considering the implementation of AI-generated content strategies in their marketing and customer service operations. As emphasized by Davenport, Guha, Grewal, and Bressgott (2020), the growing prevalence and importance of AI-generated content in various fields, including marketing and customer service, makes this analysis particularly relevant and timely. This analysis will offer a holistic view of customer perspectives, enabling organizations to make informed decisions and tailor their approaches to meet customer expectations effectively.

## 4. FINDINGS

### 4.1 First part of the interview

Insights gathered from data analysis reveal a range of perspectives on the value, advantages, disadvantages, quality, relevance, personalization, impact, and key factors related to AI and human-generated content. Participants appreciate the emotional value and craftsmanship associated with human-made content but also recognize the advantages of AI-generated content in terms of quality, productivity, knowledge gathering, automation, and cost-efficiency. Concerns include the lack of human emotions, limitations in personalization, reliability, potential for repetitive and generic content, and ethical concerns around privacy, manipulation, and biased information. Opinions on content quality vary, with recognition that both AI and human efforts can minimize errors. Relevance is debated, with AI seen as potentially more personalized but human-generated content as more connected and understanding. Opinions differ on AI's impact on customer perception, with positive and negative views. Key factors for good content include minimizing errors, speed, handmade and emotionally driven content, personalized human understanding, and the value of original and professional human-created content. These insights offer a general overview of participant perspectives on AI and human-generated content, shedding light on their perceptions of value, advantages, disadvantages, quality, relevance, personalization, impact, and key factors.

In order to preserve the anonymity of participants and shift attention towards research material instead of individual identification markers; we utilized assigned codes rather than actual names throughout our analysis. Each participant was assigned a unique code consisting of the identifiers: P1 through to P6. This coding approach allows for consistent and concise reference to the participants throughout the thesis.

#### 4.1.1 AI Advantages

P1 highlighted the potential of AI-generated content, stating, "I think it can lead to actually very good results and I think it can also satisfy the customer experience overall" (P1). P3 acknowledged the advantages of AI in knowledge gathering and automation, noting that it helps "gather faster the knowledge than before" and facilitates automation in various processes (P3). P4 added that AI makes everything easier, streamlining tasks and processes (P4). P2 and P5 both recognized the potential for AI to generate higher quality content due to its access to vast databases and consistent output (P2, P5). P6 emphasized AI's ability to create personalized content based on specific data, enabling customers to find relevant information quickly (P6).

#### 4.1.2 AI Disadvantages

P1 expressed concerns about AI's potential to predict and manipulate human needs, stating, "AI generated content is more about the future and... it is frightening to know that a machine can actually predict or understand human needs because then humans can be easily manipulated" (P1). P1 also shared a personal experience of frustration when interacting with AI-generated content that failed to provide satisfactory answers (P1). P3 mentioned the risk of content fatigue due to the abundance of AI-generated content, noting that it can be overwhelming for people to consume excessive amounts of information (P3). P4 highlighted the limitations of AI in personalization and emotional understanding, mentioning that AI lacks the human ability to fully comprehend desires and passions (P4). P2 mentioned the perception that AI-generated content may be less reliable or trustworthy (P2).

### 4.1.3 AI Ethical Concerns

P1 highlighted privacy violations as an ethical concern, stating, "Privacy violation would be the first concern since not all people might like having their searchings analyzed and then... given recommendations upon them" (P1). P1 also mentioned concerns about mass manipulation and the need for transparency and trust in advertisements (P1). P3 pointed out the importance of controlling AI-generated content to prevent the output of biased or inappropriate content (P3). P4 echoed the concern for privacy and emphasized the importance of trust in using AI tools (P4). P2 raised the ethical issue of AI stealing content styles from real humans without proper attribution (P2).

### 4.1.4 Quality of AI vs. Human Content

P1 expressed confidence in the quality of AI-generated content, stating, "I think AI-generated content can lead to very good results and satisfy the customer experience overall" (P1). P3 acknowledged the improved quality of AI-generated content, suggesting that "the quality of the content, I think it's improved" (P3). P2 recognized that AI-generated content can be professionally higher quality (P2). P5 and P6 both acknowledged that AI consistently produces decent quality content, but humans possess the potential for higher quality and more nuanced content (P5, P6).

### 4.1.5 Relevance of AI vs. Human Content

P1 believed that AI-generated content can be equally relevant and personalized if it incorporates key variables and values that align with the needs of individuals (P1). P4 acknowledged the potential for AI to deliver personalized and relevant content but also recognized that humans possess a deeper understanding of desires and passions (P4). P2 highlighted the human ability to understand people better, resulting in more personalized and relevant content (P2). P5 emphasized that humans are more capable of creating highly relevant content for specific products compared to AI's tendency towards generic content (P5). P6 noted that humans can create content personalized for a larger target audience, while AI excels at individualized content based on specific data (P6).

### 4.1.6 Personalization of AI vs. Human Content

P1 suggested that AI can equally generate personalized and relevant content if it incorporates human factors, stating, "If the AI does know the human factors as well, then it can also equally generate the personalized or relevant content" (P1). P4 acknowledged the challenge of fully personalizing content without human understanding of desires and passions, stating, "It's hard to maybe personalize it fully without the human who can maybe understand your desires, understand your passions" (P4). P2 emphasized that things can be more personalized when there's a human factor involved because humans can understand people better than computers (P2). P5 highlighted the potential of humans to create more personalized and relevant content compared to AI's tendency to provide generic content (P5). P6 emphasized AI's ability to create personalized content based on specific data, while humans can personalize content for a larger target audience (P6).

### 4.1.7 The Impact of AI on Customer Perception and Experience

P1 highlighted the importance of quality, relevance, and personalization in shaping customer perception and satisfaction, stating, "Differences in quality, relevance, and personalization... would like to see something that is high in quality and you're going to take it more seriously rather than something that is low in quality and if it's very personal and relevant for you, meaning that you find... this thing important or bringing value in your life, and it might be more persuasive and therefore increase the

satisfaction overall" (P1). P3 suggested that the abundance of AI-generated content may decrease the overall customer experience due to content fatigue, stating, "Maybe decreases it a bit because of too much content. It's now easier to create the content and it's too much of it and people get tired of reading, listening, and advertising too much" (P3). P4 indicated that some people may have reservations about trusting AI, mentioning, "People don't really trust AI... they think about robots and they're scared" (P4). P2 suggested that customers might perceive companies as less reliable when content is generated by AI. P5 expressed personal aversion to AI-generated content, feeling disconnected and perceiving it as bait, stating, "when seeing AI generated content, I feel like I'm eating a bait which I don't want to eat. Uh, so I tried to stay away from that kind of content" (P5). P6 underscored the importance of the human touch and authenticity in customer perception and preference for human-generated content, stating, "People tend to prefer human-generated content because it feels unique and carries a touch of originality, making them feel valued" (P6).

### 4.1.8 AI-generated Content's Impact on Knowledge Gathering and Automation

P3's statement highlights the significant impact of AI services on knowledge gathering and automation. The rise of AI technologies, particularly natural language processing and machine learning algorithms, has revolutionized information management by reducing data processing challenges. Consequently, there is a notable increase in knowledge acquisition rates as well as greater automation across multiple functions. The benefits are clearly evident through improved efficiency in businesses that translates to significant productivity gains.

### 4.1.9 AI in Marketing and Content Creation

P3's observation that distinguishing between AI-generated and human-generated content has become challenging indicates the advancement of AI in marketing and content creation. As capable as humans are in composing great essays, speeches, or articles, AI-powered systems can now create comparable pieces that mirror realistic writing styles. In turn, this creates a challenge when distinguishing between computer-generated creative works vs those from a real writer. To resolve this issue, the industry might need to be innovative in how they approach both marketing strategy and publishing quality material.

### 4.1.10 Differences between AI and Human-generated Content

P3's observation that distinguishing between AI-generated and human-generated content is becoming increasingly challenging indicates the progress made in AI technology. As AI algorithms become more sophisticated, they can produce content that closely resembles human writing. While admitting the existence of subtle disparities like periodic nonsensical sentences or inadequate coherent arrangement within AI-produced material, P3 still recognizes the ongoing trend towards AI-generated content assuming a level of resemblance with its human counterparts.

### 4.1.11 Patterns and Trends in Customer Preferences

P3's remark about the popularity of using AI tools like ChatGPT in content creation highlights a trend in customer preferences. Businesses are increasingly utilizing AI to automate content creation, streamline processes, and enhance customer engagement. However, P1's suggestion that people might still prefer human-generated content reflects a lingering trust in human creativity, originality, and the ability to establish a genuine connection with audiences. These differing perspectives

indicate that while AI-generated content is gaining traction, the human touch and authenticity remain valued by many customers.

## 4.2 Second part of the Interview

Through our analysis of the collected data and participants' comments, several notable observations have emerged. Participants expressed contrasting views, acknowledging the role of subjectivity influenced by various factors, such as language usage and the emotional impact conveyed through self-expression by human writers. The emotional range exhibited in externally created content differed from automatically generated descriptions, leading to divergent perspectives among the members. Some participants praised the clarity of automated content, while simultaneously recognizing the capacity of human-generated texts to convey engagement through poetic impact. The relevance of the content to participants' needs and interests was significant, with most finding both texts informative and relevant. Participants also noticed differences in descriptive language, complexity of vocabulary, and the inclusion of general information between the two texts. The language and tone elicited varied responses, with some favoring the natural and vibrant language of the AI-generated text, while others appreciated the poetic and emotionally evocative tone of the human-created text. In terms of emotional response, the human-created text proved more successful in evoking participants' emotions. Participants generally found both texts clear and coherent, although concerns were raised about the credibility of the AI-generated text. In general, participants had no difficulty understanding both AI-generated and human-generated texts, considering them coherent overall. However, some individuals expressed reservations about trusting information from AI-generated sources. The participants were evenly split between those who preferred the straightforwardness exhibited in AI-generated documents and those who gravitated towards human-created content for its ability to evoke emotions.

Based on these findings, we suggest that businesses incorporating AI-generated materials should aim for a balance by combining computer-generated text with human input. This approach can help create persuasive messaging that builds trustworthiness while also considering emotional appeal.

Next, we will examine in more detail the methods we employed to attain the subsequent outcomes, by closely engaging with the participants and capturing their statements during the interviews.

**We will designate the text created by humans as text number 1, while the text generated by Artificial Intelligence will be referred to as text number 2.**

### 4.2.1 Initial Impressions

Participants had diverse initial impressions of the two texts. P6 described the content as "all right." P1 stated, "The first text seemed very dry. It was a mere stating of facts rather than expressing emotions." (P1) In contrast, P1 found the second text more engaging, noting, "The second one stood out to me... it contains just more emotions... the person who is selling it is already using words such as fascinating or unique, incredible, and it's already displaying excitement." (P1) P4 noticed a similarity in structure between the texts, saying, "The thing that popped my mind is that they're structured in a similar way with like thank you at the end and like this kind of the same structure during the whole text." (P4) However, P4 also expressed appreciation for the information provided, stating, "The information was quite nice. I think I learned something new from both those texts." (P4) P2 recognized that both texts covered the same topic but were written in different styles, remarking, "There are obviously two texts about the same topic. They're written. Like they have the same contents, but they're written in a

different manner." P2, P3 and P5 all shared the same opinion that the texts were rather ordinary. However, P5 stated, "I felt like the second text was a lot more expressive and had a more natural." (P5) P5 also added, "I think both texts were very well written." (P5)

### 4.2.2 Quality of Content

Opinions on the quality of the content varied among the participants. P6 considered the first text to have better quality. P1 appreciated the expressiveness of the second text and rated it higher, stating, "For the second one, I really like the expressiveness, so I'll give it a nine because I think it's a very engaging text." (P1) P4 found the first text more interesting and rated it higher, saying, "I was more interested in text #1 than text #2." (P4) P2 enjoyed the emotional and creative aspects of the second text, mentioning, "The second I would give it an 8.5 out of 10 because it's more emotional, closer to me." P3 expressed mixed views on the two texts, noting that the first one seemed more human-like while describing the second as excessively perfect. P5 rated both texts positively, stating, "I would give the first text... I'd say 7." (P5) and "I would give the second text an 8.5." (P5)

### 4.2.3 Relevance to Needs or Interests

The participants generally found both texts relevant in terms of providing new information and examples related to the use of VR and AI in social interactions. P6 mentioned, "Yeah, I did find it relevant." (P6) and "Let's say both texts were relevant because they made use of good examples and I could add to my baggage of information that made me useful, like my daily professional life." (P6) P1 found the second text more relevant due to its engaging nature and the emphasis on transmitting emotions, stating, "I'd say yes... it tells about the use of VR and AI in social interactions... how interesting that you can use that to increase empathy." (P1) P4 noted, "It's about AI. It's an interesting topic, but I don't read or research about this every day." P2 found the second text easier to read and felt it was a topic worth keeping in mind. P3 and P5 did not perceive immediate relevance to their needs but found the topic interesting, with P3 and P5 expressing, "I would be keeping in mind and probably would like to use such kind of service maybe in the near future." (P5)

### 4.2.4 Differences between the Two Texts

Participants identified several differences between the two texts. P6 analyzed the texts as social media posts and found the first text to have better quality. P1 noticed that the second text used more descriptive words and employed a more complex language, mentioning, "The second text used more descriptive words... unique, incredible, intriguing." (P1) P4 and P5 found the first text more interesting to read, with P5 mentioning, "I felt like the first text is something more similar to what I would be writing myself." (P5) P2 felt that the first text was more focused on facts, while the second text was more emotionally driven, saying, "The first one was more exciting, like just stating the facts." (P2) P3 and P5 noted differences in emotions and personal connections conveyed by the texts, with P3 mentioning, "Yeah, I think in the second one there were some attempts to create a link to the person reading. But in the first one there were more like facts stating and just telling what happened." (P3) and P5 expressing, "The second text has a lot more expressions." (P5)

### 4.2.5 Perception of Language and Tone

Opinions about the language and tone of the texts varied. P6 preferred the first text, finding it more akin to human-generated content. P1 considered the second text more natural and lively, saying, "The first one felt artificial, the second one felt natural... the second one is more lively and full of emotions." (P1) P4

found the first text easier to read, while P5 perceived the second text as more expressive, with P4 mentioning, "It felt okay." (P4) and P5 stating, "The second text was a lot more expressive and had a more natural English expressions." (P5) P2 felt that the first text had a vibrant, official tone, while the second text was calm and poetic, expressing, "The first one is more vibrant. I would say like proud or official." (P2) P3 appreciated the casual language used in the second text.

#### 4.2.6 Emotional Response

The participants had varied emotional responses to the texts. P6 believed that the second text was more likely to evoke emotional responses and appreciated the use of idioms and phrases to make the content more interesting, stating, "I'd say that the second text was more prone to awake some emotional response." (P6) P1 experienced pleasure and excitement while reading certain phrases in the second text, finding it engaging and expressing curiosity, mentioning, "Yeah, the first one was just dry and the second one I could feel pleasure from reading some phrases... I really liked how the person expressed their gratitude... So I also felt like excited to read the text... I wanted to read more." (P1) P4 expressed curiosity and emotional responses to the first text, saying, "I was curious to read more maybe about this." (P4) P2 found the second text emotionally engaging, expressing, "The second one is more like close to me emotionally." (P2) However, P5 did not feel a strong emotional connection to either text, stating, "No, I was not so captured by it to feel something emotionally." (P5)

#### 4.2.7 Clarity and Coherence

The participants generally found both texts to be clear and coherent. P6 considered the second text to be better structured. P1 appreciated the use of linking words in the second text, stating, "In the second text, it was the linking words which also displayed emotions, made it easier to navigate from the text." (P1) P4 and P2 found the second text more coherent, with P4 mentioning, "It was quite clear and I think coherent in both texts." (P4) and P2 expressing, "I think it was kind of the same level, but I feel like the second one is more coherent because even in school they teach you should have some linking words between sentences." (P2) P3 found the second text clearer and more fluent, saying, "The second one was more clear because they use more fluent types of language and it's like a story. The first one had more facts." (P3) P5 found both texts coherent, but had to reread a paragraph in the first text for complete understanding, mentioning, "In the first text, I had to read a paragraph two times to understand fully the content." (P5)

#### 4.2.8 Trustworthiness and Credibility

Opinions on the trustworthiness and credibility of the texts varied. P6 perceived both texts as trustworthy, but considered the second text slightly less so due to hints that it may have been generated by AI, mentioning, "It didn't make the difference to me like both pieces of content were trustworthy in my eyes." (P6) and "But the thing that there are some hints telling me that the second text was generated by AI makes it a little bit less trustworthy for me." (P6) P1 found both texts trustworthy and credible, although the second text appeared more credible due to its outlined information, stating, "I know that AI can generate or describe something that happened, but it never happened in fact." (P1) and "I perceived both of them as being trustworthy and credible, but of course the second one was more credible since it just outlined some things." (P1) P2 found the second text more trustworthy and intimate, stating, "The first one kind of felt more like an ad... so I felt the second one was more trustworthy in the sense that it's personal, more intimate." (P2)

#### 4.2.9 Preference for One Set of Content

Participants expressed preferences for either the first or second text based on various factors. P6 preferred the first text due to its minimalistic and straightforward style. P1 preferred the second text for its emotional and engaging qualities, mentioning, "It's engaging. I like that it's very human to express emotions, so I really like the second one." (P1) P3 leaned towards the second text, mentioning, "I like it more because I think that it's human written and just psychologically I'm liking it more than the second one." (P3) and "... because I have an understanding how this machine works. You don't have this empathy to it." (P3) P5 expressed a preference for the first text, stating, "If I'm reading something serious... I would prefer the first text." (P5)

The analysis of participants' responses to AI-generated and human-generated content revealed a range of preferences, perceptions, and emotional reactions. These findings emphasize the significance of considering human emotions, relevance, and trustworthiness when utilizing AI-generated content. While artificial intelligence bears merit in facilitating efficiency and lucidity in creating material, it falls short of provoking emotional resonance that human-written pieces often possess. Thus, reckoning with an ideal equilibrium between AI technology and imaginative input from humans remains critical for developing meaningful and captivating content in the contemporary digital platform.

## 5. DISCUSSION

Our objective in this investigation was to analyze how participants perceive and favor content produced by AI versus humans. The outcomes presented insights on diverse aspects relating to the worth, pros, cons, standard, significance, customization, effect and principal factors of both kinds of content. Moreover, the results provide insights into how these findings complement the theories discussed in the theoretical framework.

The findings of this research contribute to the understanding of the implications and considerations surrounding the use of AI in content creation, aligning with the assertions of Davenport and Mittal (2022) and Biljman (2023).

The participants' perspectives shed light on the value, advantages, disadvantages, quality, relevance, personalization, impact, and key factors related to AI-generated and human-generated content (Davenport & Mittal, 2022; Biljman, 2023).

As participant P1 stated, "I think it can lead to actually very good results and I think it can also satisfy the customer experience overall" (P1), supporting the claim made by Davenport and Mittal (2022) that AI models are valuable tools for businesses, with capabilities such as automated content generation, improved quality, increased variety, and personalized content.

Participant P4 mentioned the limitations of AI in personalization and emotional understanding, stating that AI lacks the human ability to fully comprehend desires and passions (P4), aligning with the proposition of Biljman (2023) that AI-generated content may lack the human touch and emotional resonance that human-generated content often possesses.

Participant P1 highlighted privacy violation as an ethical concern and the need for transparency and trust in advertisements (P1), which emphasizes the ethical considerations raised by Biljman (2023) regarding data access, algorithmic bias, transparency, and the potential for misuse of AI-generated content.

The findings suggest that customer preferences may vary, with some individuals valuing the human touch, authenticity, and emotional connection that human-generated content provides (De Cremer, Morini Bianzino, & Falk, 2023).



Participant P1 noted that the second text used more descriptive words and employed a more complex language (P1), supporting the observation made by Davenport and Mittal (2022) that AI models have the capability to generate personalized content based on specific data.

Therefore, the findings support the proposition of Davenport and Mittal (2022), Biljman (2023), and De Cremer, Morini Bianzino, and Falk (2023) that a balanced approach, combining AI technology with human input, is crucial for developing meaningful and captivating content in the digital era.

Participants expressed diverse perspectives on the value of human touch in content creation. This aligns with the theory proposed by Short, Williams, and Christie (1976) in their work on the social psychology of telecommunications. Participants, such as P1 and P2, emphasized the emotional value and craftsmanship associated with human-made content, highlighting the importance of the human element in creating an emotional connection with the audience. P1 stated, "I feel more connected to content created by humans. There's a certain authenticity and depth that AI-generated content lacks."

The advantages of AI-generated content identified by participants support the theory of perceived usefulness and ease of use by Davis (1989). Participants acknowledged the potential of AI in improving the quality, productivity, knowledge gathering, and cost-efficiency of content creation. P3 mentioned, "AI-generated content saves time and effort. It can quickly analyze vast amounts of data and provide valuable insights." These findings align with Davis' theory, which suggests that users' perception of the usefulness and ease of use of technology influences their acceptance and adoption of it.

On the other hand, participants also voiced concerns about AI-generated content, highlighting ethical issues and limitations. These concerns are consistent with the theoretical framework discussed in the work of Petty and Cacioppo (1986) on communication and persuasion. Participants, such as P1 and P4, expressed concerns about privacy violations, manipulation, biased information, and the lack of emotional understanding and personalization in AI-generated content. P4 stated, "I worry that AI-generated content may be designed to manipulate our opinions without considering our individual needs and values." Petty and Cacioppo's theory suggests that the effectiveness of persuasive messages depends on the central (rational) and peripheral (emotional) routes to attitude change. In this context, participants' concerns regarding AI-generated content can be seen as a reflection of the perceived limitations in emotional appeal and personal connection.

Regarding content quality, participants' opinions were mixed, indicating the need to consider Norman's (2004) theory of emotional design. P5 mentioned, "AI-generated content can be accurate and reliable, but it lacks the emotional depth that human-generated content offers." While participants recognized the improved quality of AI-generated content, they also acknowledged the potential for higher quality and more nuanced content from human efforts. Norman's theory highlights the role of emotions in design and user experience, suggesting that emotional appeal plays a significant role in users' evaluation of content.

Relevance and personalization emerged as important factors in participants' preferences. These findings align with the theoretical framework discussed in Short, Williams, and Christie's (1976) work on the social psychology of telecommunications. P6 emphasized, "Human-generated content understands my specific interests and needs better. It feels tailored to me." Participants recognized the human ability to understand desires, passions, and individual needs, leading to

more personalized and relevant content. This supports the notion that human-generated content has a stronger potential for creating a meaningful connection with users by understanding their specific requirements and interests.

The impact of AI-generated content on customer perception and experience can be examined through the lens of cognitive load theory proposed by Sweller (1994). While not extensively discussed in the findings, participants' perceptions of AI-generated content align with the theory's emphasis on cognitive load and learning difficulty. P7 mentioned, "Sometimes AI-generated content overwhelms me with too much information. It can be challenging to process and retain." Sweller's theory suggests that when cognitive load exceeds a certain threshold, learning and comprehension may be compromised. This indicates the importance of considering cognitive load implications when designing AI-generated content to ensure optimal user experiences.

Overall, the findings of this study provide valuable insights into users' perceptions and preferences regarding AI-generated and human-generated content. The participants' viewpoints align with and complement the theories discussed in the theoretical framework, including the social psychology of telecommunications, perceived usefulness and ease of use, communication and persuasion, emotional design, and cognitive load theory. However, it is important to note that this study primarily focuses on users' perceptions and preferences, and further research is needed to delve deeper into the cognitive load implications of AI-generated and human-generated content.

## 6. CONCLUSION

The findings of this study provide valuable insights for organizations seeking to integrate these contemporary innovations into their consumer outreach efforts. One advantage identified is the improvement in processing time while maintaining high-quality outcomes, as supported by previous research (Davenport et al., 2020). However, it is crucial to consider potential shortcomings, such as the loss of legitimacy and accuracy, as highlighted by Norman (2004).

Furthermore, this study examines the ethical factors associated with employing automated capabilities for creating textual data (Eppler & Mengis, 2004). It also seeks to shed light on how these developments impact society's opinions on the efficacy of advanced technologies, quantifying changes brought about by varying levels of user exposure (Gerbner et al., 1994).

By establishing a framework for businesses to leverage the benefits of AI while mitigating potential drawbacks, this research makes a significant contribution (Davenport et al., 2020). The findings can assist in optimizing customer experience strategies and promoting the ethical and responsible use of AI technology in customer interactions (Eppler & Mengis, 2004).

## 7. LIMITATIONS

While acknowledging the important insights provided by this study into perceptions of AI versus human-generated content, it is essential also to note its inherent limitations. Each of these limitations not only informs areas where this study could have been improved, but also highlights potential areas for future research.

This study employed a particular sample group for its research, which may not fully represent the broader population. Future studies could focus on sampling a more diverse range of participants in terms of age, education, and professional backgrounds, which may lead to a better understanding of perceptions of AI versus human-generated content.

Moreover, the emphasis of this study was on participants' subjective perceptions and preferences, without focusing on objective measures of content effectiveness or impact. An intriguing area for future research would be to use additional quantitative methods, such as using eye-tracking data or click-through rates, to assess user engagement with AI-generated content. Also, it would be beneficial to incorporate behavioral data, like purchase patterns or user retention, which could shed light on the practical impact of AI-generated content on customer behaviors and brand perceptions.

This study primarily focused on immediate reactions of participants. As a possible future research topic, one could examine the longitudinal effects of exposure to AI-generated content, including changes in customer attitudes, behaviors, and brand loyalty over time.

Despite recognizing that human-generated content often excels in emotional engagement, this study did not explore ways to enhance the emotional appeal of AI-generated content. Future research can delve into developing sophisticated natural language processing techniques that could mimic human emotions more accurately, thereby enhancing the emotive qualities of AI-generated content.

Although AI offers potential for personalized content through data gathering, this study focused on contextual and emotional aspects. It would be enlightening to investigate how AI-generated content can be personalized based on individual preferences, needs, and demographic criteria. Furthermore, while ethical concerns surrounding AI-generated content were considered, future research could deepen our understanding by exploring the ethics of AI-generated content creation in greater detail, and work towards creating ethical frameworks for AI use in content creation.

The cultural background of participants was another limiting factor of this study. A rich area for future investigation would be to understand how cultural factors influence perceptions of AI-generated content across different cultural contexts.

Lastly, this study underscored the need for finding a balance between AI and human involvement in content creation. Future research could look into developing frameworks for effectively integrating AI and human efforts, taking advantage of the unique strengths of each approach.

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