Received 7 May 2025
Revised 21 February 2026
17 April 2026
Accepted 25 May 2026

Taming the "techno-monster": marketing managers' perceptions of AI systems and humanization challenges

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Abstract

Purpose – Artificial intelligence (AI) has changed the way organizations interact with their customers. This has instigated a necessity for businesses to address marketing managers' concerns and perceptions of the role of AI-powered systems in marketing processes. Although managers accept the fact that AI can potentially improve marketing practices and enhance efficiency, theories of Digital Leviathan predict inherent managerial anxiety about AI's destabilizing effects.

Design/methodology/approach – This study employs a qualitative method based on 12 in-depth interviews with marketing practitioners in Jordan, an emerging knowledge economy, to investigate key dimensions of marketing managers' perceptions of AI.

Findings – Findings from the interviews reveal four dimensions that explain marketing managers' Leviathanian perceptions: (1) emotion-driven empathy, (2) algorithmic opacity and explainability, (3) encryption and privacy concerns and (4) engagement, which are subsequently organized into an integrative framework that captures managerial concerns about the AI-driven marketing systems. These findings provide important insights into managerial perceptions of AI systems. They are underscored by the attribution of automatism to an emerging market Leviathan in developing economies. Together, these four dimensions capture managerial concerns on the trade-off between efficiency and humanization arising within AI-driven marketing practices.

Originality/value – This study offers several strategies to enhance technological humanization to help marketing managers to tackle Leviathanian concerns.

Keywords Artificial intelligence, Digital leviathan, Technological humanization, Empathy, Emotional intelligence, Algorithmic opacity, Impersonal interaction

Paper type Research article

Introduction

The marketing technology landscape has experienced significant transformation as artificial intelligence (AI) applications are becoming increasingly integrated into various marketing processes, offering substantial opportunities for businesses (Hicham *et al*., 2023; Verma *et al*., 2021). De Bruyn *et al*. (2020) define AI as "machines that mimic human intelligence in tasks such as learning, planning, and problem-solving through higher-level, autonomous knowledge creation" (p. 97).

Within stable business environments, AI has the potential to assist managers in automating non-complex and recurring decision-making processes in both operational (Duan *et al*., 2019) and strategic levels (Goul *et al*., 2020). Although research has shown that the application of AI in marketing has been fruitful (Hicham *et al*., 2023), the wider adoption of AI in marketing

Information Technology & People
Vol. 39 No. 8, 2026
pp. 80-104
Emerald Publishing Limited
e-ISSN: 1758-5813
p-ISSN: 0959-3845
DOI 10.1108/ITP-05-2025-0625

requires thoughtful consideration of the unique needs and preferences of marketing professionals as well as the broader market base (Huang and Rust, 2018).

As both academics and practitioners celebrate the efficiency benefits of AI-driven marketing technology, marketing managers find themselves in a profound dilemma. On the one hand, some benefits of generative AI technologies enhancing marketing practices and improving customer experiences are apparent. On the other hand, marketing managers see AI systems as a trade-off between efficiency and superior customer experience. This is due to the customer perceiving AI systems as less creative due to deficiency in mimicking human emotions and empathy (Mayahi and Vidrih, 2022).

The lack of empathy, personalized understanding and warmth may limit the scope of AI applications (Ho and Chow, 2024; Luo *et al*., 2019). AI tech represents a "black box" that fosters perceptions of minimal transparency, because it exploits personal data without offering an avenue of both personal and professional control (Robert *et al*., 2020). Moreover, the over-reliance on hyper-personalization makes this interaction feel invasive and intrusive, while concurrently inducing a fear of manipulation and distrust. Privacy concerns may also lead to the issues around the invasiveness of AI interactions, which further amplify the fear of manipulation (Lim and Shim, 2022).

This study is guided by the following research question: *How do marketing managers perceive the uncontrollable aspects of AI-powered systems, and what organizational and technological strategies can be proposed to humanize AI-driven marketing interactions?* The analysis of current literature indicates the dearth of robust theoretical frameworks explaining how marketing managers perceive and deal with the trade-off between technology-driven efficiency and desired empathic service. We draw on theories of Digital Leviathan to shed light onto nature, dimensions and strategies of dealing with this trade-off. To accomplish this, we explore the perceptions of marketing professionals of AI-based systems and their suggestions on how one can humanize AI systems to enhance customer experiences. Through interviews with 12 marketing practitioners in Jordan, this study provides insights into a managerial reaction to AI technologies and managerial suggestions on enhancing the perceived humanness of AI-driven marketing practices.

The theoretical contribution of this research is that it extends the body of literature on marketing technology-human interactions through the unique application of Digital Leviathan theory with the aim to explain how managers develop and manage their perceptions and anxieties about the uncontrollable aspects of emerging AI solutions. Moreover, the findings extend the knowledge on the managerial perceptions of Digital Leviathan, which pivot around the four identified dimensions: (1) emotion-driven empathy; (2) algorithmic opacity and explainability; (3) encryption and privacy concerns and (4) engagement-oriented humanization. These findings reveal that managers interpret AI-based systems not only as a technical tool, but as a socio-technical actor that mediates control, trust and interaction. These results extend the Digital Leviathan perspective by showing how organizational actors attempt to mitigate perceived algorithmic power and uncontrollability through the deliberate intent to implement humanization and transparency strategies.

The significance of this research lies in the development of a novel efficiency-empathy tradeoff framework. This framework is proposed as a guide for marketing managers and other practitioners to support the design of balanced, humanized systems that address managerial concerns about the Leviathanian features of AI-driven technologies. In addition, this research offers a set of different managerial strategies to deal with the negative perceptions of AI technologies. It is proposed that managers should adopt the Digital Leviathan perspective to move beyond the rhetorical fixation on the balance of power and order in digital spaces toward the strategic implementation humanization initiatives (Hamel, 2009). The proposed principles can be used by marketing managers, or in general, by organizational leaders and government officers, to design AI-driven processes that are more empathic, fair, transparentand secure.

Theoretical foundation

Theories of Digital Leviathan

In *Leviathan*, Hobbes (1909) argues that humans need a powerful centralized authority that can guarantee an ordered and law-driven society against the violent and chaotic tendencies of human nature. Borrowed from a biblical imagery of a sea monster, the Leviathan is a metaphor that represents the authority/state made up of individuals who are willing to exchange their freedom for safety (Hobbes, 1909). As the Leviathan enforces laws and ensures justice, society members are deterred from acting purely on their self-interest or violent impulses. Leviathan's power is derived from the social contract, an agreement among individuals to hand over certain freedoms to form an organized civil society (Hoffman, 2020; Langford, 2020).

Several contemporary thinkers argue that civil society is becoming a Digital Leviathan (Fernandez, 2023; Hoffman, 2020). Hoffman (2020) writes that "The Digital Leviathan is headless. No president, no king, just unstoppable, openly verifiable code. Power to the people" (p. 1). Fernandez (2023) insists that digital transformation is rapidly reshaping societies across the globe. While it offers significant benefits, it also presents substantial risks that are as important as the risks of climate change or terrorism. Without proper institutions and regulations to govern disruptive technologies in both society and government, societies risk falling under the control of an uncontrollable "Digital Leviathan" (Fernandez, 2023). Although AI technologies offer predictability and efficiency, human rights' activists are concerned about Leviathanian functions of "robo-judging" and "robo-administration" (Langford, 2020).

A newly arising market-based Digital Leviathan is increasingly evolving into a system of AI marketing applications (Conick, 2017; Kumar, 2019; Verma *et al*., 2021). This system offers enhanced efficiency for marketers, offering time savings, enhanced company-consumer connections and streamlined customer service (Conick, 2017). By leveraging AI-powered tools and algorithms, businesses can digest and analyze vast amounts of customer data to seamlessly extract structured insights about customer preferences, behaviors and patterns (Verma *et al*., 2021). As Kumar (2019) highlights, AI applications are crucial for extracting meaningful insights from big data, which alleviates the burden of information processing. AI-powered predictive analytics is reshaping marketing by automating customer behavior forecasting and allowing marketers to anticipate needs and develop targeted campaigns (Verma *et al*., 2021; Yau *et al*., 2021). Although marketing professionals lose some control over analytical processes, the dilemma is that top-tier management and investors may not consider this a significant a problem, since the Digital Leviathan guarantees improved organizational profitability (Ho and Chow, 2024).

Theories of Digital Leviathan are concerned about the implied tradeoff between human rights/dignity and the gains in operational efficiency (Hoffman, 2020). In practice, the integration of AI technologies in marketing has substantial benefits. AI improves customer experiences; strengthens relationships between consumers and brands, and contributes to brand distinctiveness and brand equity (Ho and Chow, 2024; Yau *et al*., 2021). These benefits are enabled by tools such as chatbots and personalized recommendation systems, by responding instantly to customers' inquiries and making recommendations that are specific to the needs of the user (Hermann, 2022; Hicham *et al*., 2023; Yau *et al*., 2021). Additionally, AI-powered tools enable organizations to gather and analyze large amounts of data, improving their marketing strategies and practices (Mishra *et al*. (2022), while automating routine tasks and facilitating personalized content generation, thereby improving marketing effectiveness (Khan, 2023). Overall, AI-driven capabilities streamline marketing processes and contribute to more efficient and informed decision-making (Ameen *et al*., 2021).

Despite the vast benefits and increasing integration of AI in marketing practices, a question remains open regarding whether marketing managers simply accept AI systems on their face value, based on these systems' potential benefits, particularly when these systems seem out of step with the traditional notion of humanized service and emotional interaction. This ambiguity calls for deeper and more comprehensive exploration of how managers perceive

these systems. Understanding managers'perceptions about AI is essential in addressing concerns about privacy, empathy and personalization, which forms the basis for the discussion in the next section.

Managerial anxiety about the market-based digital leviathan

Although the adoption of AI in marketing has brought significant benefits to marketing managers, it poses challenges such as customer discomfort and distrust (Huang and Rust, 2021). One of the primary concerns is that AI systems are often seen as impersonal, lacking the nuanced empathy and human-like understanding required for successful customer interactions (Mayahi and Vidrih, 2022). As a result, customers tend to feel disconnected when dealing with AI, which can lead to reduced engagement and fewer purchases (Davenport *et al*., 2020; Luo *et al*., 2019). This difficulty arises because AI struggles to replicate genuine human emotions and social cues, which are essential for building trust in customer service settings (Huang and Rust, 2021; Liu-Thompkins *et al*., 2022).

The Uncanny Valley Theory explains the discomfort people feel toward human-like but artificial entities, and it offers insights into why AI systems might elicit negative reactions (Ho and MacDorman, 2010; Zhang *et al*., 2020). First proposed by Mori in 1970 (Zhang *et al*., 2020), this theory suggests that non-human entities (including AI-based systems) are becoming more human-like but yet failing to replicate authentic human behavior. Therefore, they tend to evoke feelings of discomfort and mistrust (Ho and MacDorman, 2010; Zhang *et al*., 2020). This occurs when AI systems do not accurately replicate human emotions, empathy or social cues, increasing the risk of crossing into the "uncanny valley", which is the customer perception about the system as lifelike but still artificial (Ho and MacDorman, 2010; Zhang *et al*., 2020). This theory suggests that marketers should carefully balance realism with artificiality, as negative reactions might result from the overuse of AI, because it fails to exhibit natural conversational flow, empathy or appropriate emotional responses. This concept has been widely studied in the human–machine interaction domain and is becoming increasingly relevant to the discussion on AI-driven customer engagement (Huang and Rust, 2018).

Despite the focal drive to mimic human intelligence, AI systems often fall short, fostering feelings of unease among users (Ho and MacDorman, 2010). Customers tend to be sceptical of AI's ability to understand their unique needs and preferences, reflected in their fears that these systems may overlook their implicit motivations (Kim and Duhachek, 2018; Longoni *et al*., 2019). Research shows that marketing managers are becoming increasingly aware of this scepticism and are looking for strategies to address it (Mende *et al*., 2019).

Moreover, managers recognize that while AI systems are becoming more human-like, they still struggle to replicate authentic emotional responses, which is crucial for fostering trust and relationship in marketing interactions (Huang and Rust, 2021). Despite AI's ability to analyze vast amounts of data and personalize responses, it still struggles to replicate nuanced emotional intelligence needed for complex customer interactions (Huang and Rust, 2021; Sidlauskiene *et al*., 2023).

Customers are often hesitant to engage with AI for tasks that involve subjectivity or intuition, perceiving it as lacking the emotional depth required for such tasks (Castelo *et al*., 2018; Lemon and Verhoef, 2016). AI-driven interactions can feel cold or detached, as AI lacks the ability to experience emotions or connect with customers on a personal level (Ho and Chow, 2024; Castelo *et al*., 2018). High-tech service delivery using AI offers efficiency and speed but struggles to replicate the emotional intelligence of human-based, high-touch service (Huang and Rust, 2018; Wirtz *et al*., 2018; Larivière *et al*., 2017; Latif *et al*., 2022; Wang *et al*., 2023; Winters, 2024).

Furthermore, the lack of digital coding expertise also presents accountability challenges, as it becomes unclear who is responsible when AI decisions result in undesirable outcomes (Lu, 2020; Robert *et al*., 2020). The dynamic nature of machine learning algorithms may change unpredictably over time, further emphasizes the importance of transparency. In systems

designed to ensure safety, fairness and trust, explainability and transparency are vital (Floridi and Taddeo, 2016; Scharowski, 2020), the level of transparency significantly affects users' trust in AI systems, influencing their perceptions of fairness and bias (Bar-Gill *et al*., 2023). Thus, it is important for managers to understand how users perceive AI systems and how these perceptions shape their feelings of trust, fairness and bias (Bar-Gill *et al*., 2023; Scharowski, 2020).

In addition, marketing managers feel the pressure to navigate the delicate balance to ensure AI systems both respect customer privacy and offer personalized experiences efficiently. The increased use of AI in personalizing customer experiences raises significant concerns around data privacy and protection (Ho and Chow, 2024; Lim and Shim, 2022; Müller-Seitz *et al*., 2009). Many customers feel that AI's use of personal data for hyper-personalization violates their rights, leading to fears of data exploitation (Lim and Shim, 2022).

Though personalization is a key advantage of AI in marketing, when it becomes too intrusive, it can undermine consumer trust and scare users away from adoption (Ho and Chow, 2024). Privacy concerns are central in shaping customer perceptions of AI systems, and if these concerns are not well-managed, they can significantly hinder the acceptance of new technologies (Müller-Seitz *et al*., 2009). Key factors contributing to this perceived intrusiveness include issues like data errors, unauthorized access and the secondary use of personal information (Dinev *et al*., 2016).

Several theories try to address the balance between user privacy and personalization, such as *privacy calculus theory* (the trade-off between the perceived benefits and risks of data sharing) (Dinev and Hart, 2006), *theory of privacy paradox* (a conflict between privacy concerns and behaviours) (Joinson *et al*., 2010) and *the technology acceptance model* (TAM explores factors influencing the acceptance of new technologies) (Li *et al*., 2010). While communication privacy management (CPM) theory provides an understanding of the way how users decide about concealing/revealing private information (Petronio, 2002; Petronio and Reierson, 2015), individuals view their personal information as private property that they build boundaries around (such as risk, trust in the system and perceived benefits). A violation of the boundaries might result in a withdrawal from the service (Petronio, 2007). Individuals often make their decision whether to conceal or reveal the private information based on their judgements of risks versus benefits (Petronio and Reierson, 2015).

These theories provide a framework for understanding marketing managers' emerging perceptions of AI systems. However, these theories may need to be further evaluated in terms of their capacity to capture the complexities of AI driven marketing, as well as marketing managers' perceptions about this phenomenon. Given the evolving nature of AI technologies and customers' expectations and needs, further research is needed to explore how managers can mitigate these concerns. This study aims to bridge this gap and address these concerns.

Research method

This research employed a qualitative approach based on an inductive process aimed at synthesizing the current understanding of the dark sides of AI from the manager's perspective. The study's data-collection method was in-depth interviews. This was a suitable method, because the study concentrated on discovery of experiences, attitudes, values and interpretations (Carson *et al*., 2001; Länsipuro and Karjaluoto, 2021). The qualitative interviews were designed to encourage respondents to express their inner thoughts and in-depth perspectives. Semi-structured questions were employed to ensure the collection of in-depth qualitative narratives reflecting respondents' inner thoughts, feelings, emotions and perceptions (Campbell *et al*., 2013). While allowing for flexibility, these semi-structured interviews ensured the in-depth focus on the topics relevant to AI technologies and respective humanization challenges.

This study utilized a purposive sampling of interviewees. The participants were marketing practitioners from firms located in the capital of Jordan, Amman. The Jordanian government

set a national strategy (2023–2027) to build an environment conducive to AI sector growth and investment, and to enhance the usage of AI across different sectors. As a result, Jordan is currently ranked 5th among Arab nations and 55th globally in terms of the government's AI readiness (E-Government, 2024). A recent study conducted by the Information and Communications Technology Association of Jordan (INTAJ, 2024) found that 63% of IT companies in Jordan are implementing AI in the development of their products and services, while 42% of companies showed interest in integrating data analysis tools and technologies into their products. The selection of the geographic scope, the capital city Amman, is justified, since most of large businesses in Jordan are located here (only four out of the 26 largest businesses in Jordan are located outside Amman). Almost half of the Jordan's population lives in Amman (Kailani, 2021).

The current study focuses on marketing managers as key informants. Marketing managers play a significant role in adopting and implementing AI strategies. When it comes to the decisions requiring a balanced view of the costs and benefits of applying such systems, marketing managers can provide valuable insights into the perceptions of customers' reactions to AI-based systems. They also can offer relevant expertise on potential strategies their firms can implement to mitigate negative perceptions. They can bridge the human and technological domains, while offering insights to develop strategies to humanize AI-powered systems (Abonamah and Abdelhamid, 2024). Marketing managers are well-positioned to understand customers, since their role involves interacting with them frequently. This qualifies them to interpret customer perceptions and feelings, enabling them to develop strategies to address and respond to AI-related negative perceptions.

Interviewees were selected based on the relevance of their position within the firm and their ability to provide fresh insights derived from their expertise and experience. The criteria for selecting participants were defined with a focus on individuals currently involved or likely to be involved in AI-driven marketing activities. This included professionals directly working with AI technologies as part of their marketing roles, such as designing personalized marketing campaigns using AI, leveraging AI-based platforms to enhance customer engagement or analyzing customer data with AI tools. Some participants were not yet extensively using AI but were better positioned to do so in the future due to their responsibilities or industry trends. This includes marketers exploring AI solutions for their activities, those working in areas where AI adoption in marketing is expected to grow or professionals who have expressed interest in adopting AI. The researchers' goal was to include a broad spectrum of experience with AI in marketing, encompassing both current users and potential future adopters.

Based on these criteria, 17 marketing managers were contacted by email. Twelve of them accepted to participate in the study. Zoom interviews averaging 25–30 min each were conducted between June and July 2024. Although the interviews were relatively short, they were focused, direct and in-depth. This approach was appropriate given the seniority and professional responsibilities of the participants, for whom extended interviews were often impractical. Importantly, the interviews were deliberately designed to prioritize depth over breadth. The semi-structured interview format allowed for targeted investigation, clarification and elaboration where needed, while prior contextual familiarization with AI-related challenges ensured specific and information-rich responses. Consistent with qualitative research guidelines, depth was achieved through the richness, specificity and theoretical relevance of the narratives rather than interview length alone.

Table 1 provides an overview of the study sample, including participants' roles, industries, organizational contexts and experience with AI-powered systems. The sample was constructed to capture diverse managerial perspectives from organizations that have actively implemented or experimented with AI-based systems. Participants were selected using purposive sampling to ensure direct managerial involvement in the use or design of the AI powered system. Initial participants were identified through professional networks and industry contacts, and additional respondents were recruited through snowball sampling. This approach allowed the study to capture relevant perspectives across different sectors.

Table 1. Study participants

Participant ID	Occupation/position	Years of experience	Language of the interview	Gender
P1	Marketing Manager	10+ years	English	Male
P2	Data Scientist	5–10 years	English	Male
P3	Marketing Analyst	5–10 years	Arabic	Male
P4	Marketing Manager	5–10 years	Arabic	Male
P5	Marketing Manager	10+ years	Arabic	Male
P6	Marketing Director	10+ years	English	Male
P7	Brand Manager	5–10 years	Arabic	Female
P8	Data Scientist	10+ years	Arabic	Female
P9	Engagement Officer	<5 years	Arabic	Male
P10	Brand Manager	10+ years	Arabic	Male
P11	Data Scientist	5–10 years	English	Male
P12	Engagement Officer	<5 years	English	Male

Source(s): Authors' own work

The interview process encouraged interviewees to clarify and expand on their responses where appropriate and needed. The interviews included questions about marketers' perception of AI systems. Participants were asked to share their opinions on how different circumstances and factors contribute to users' experience of negative AI feelings and perceptions when they interact with AI systems. Participants were also encouraged to share their insights on strategies for organizations to overcome challenges and ways of improving AI marketing practices.

Short introductory overviews outlining the potential negative aspects of AI technologies were used to familiarize the participants with the context before moving on to the related questions. Interviewees were asked to reflect on how specific factors might affect their customers' perceptions of and trust in AI service systems. The questions probed into their observations of typical consumer complaints and problems as well as the possible approaches that businesses may take to deal with overcoming these challenges to enhance AI-powered marketing efforts and ensure more effective use of technology.

The interviews were administered in Arabic or English language based on the preference of the participant. We found that most interviewees were proficient in English, but some of them felt less confident conducting the interview fully in English. Therefore, the Arabic interviews were translated to English by one of the researchers and back translated to Arabic by another professional translator to ensure accuracy. The interviews were recorded and then transcribed verbatim by the researchers, which allowed for a thorough and detailed analysis. The interviews were content analyzed and then systematically interpreted. To derive insights from the data collected, main dimensions and key concepts were identified and categorized. This enabled a comprehensive exploration of key issues in the interview transcripts. Further, the transcripts were analyzed to identify key dimensions emerging from the managers' experiences and opinions, providing a structured understanding of managerial perceptions and concerns regarding AI systems.

Findings

The results presented further in the text are derived directly from the interview data and are organized into four dimensions that emerged from the participants' narratives: (1) emotion-driven empathy; (2) algorithmic opacity and explainability; (3) encryption and privacy concerns and (4) engagement. Each theme is supported by multiple interview excerpts illustrating how managers interpret and respond to the use of AI-powered systems. The key dimensions from the findings are discussed in detail further in the text. Figure 1 visually

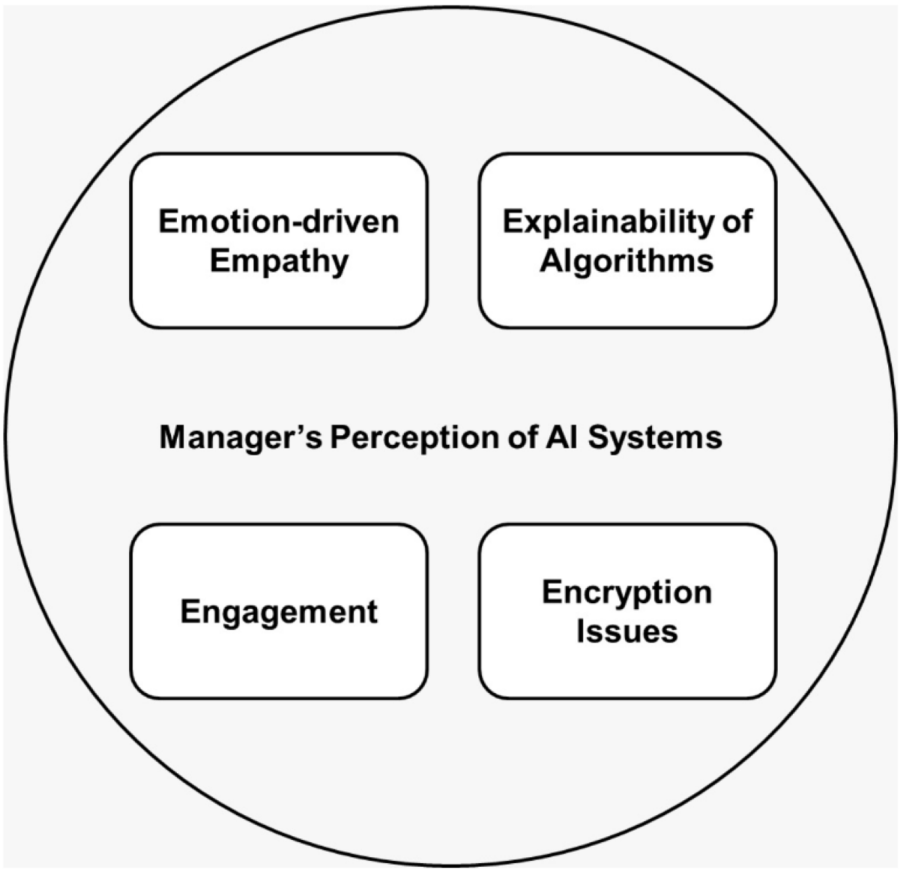

Figure 1. Marketing managers' perceptions of AI systems. Source: Authors' own work

summarizes the four dimensions and their interrelationships, providing an overview of the key factors shaping managerial perceptions.

Emotion-driven empathy

A prominent theme that emerged from the data is emotion-driven empathy. The lack of emotionality and empathic touch in AI-powered interactions was discussed by most participants. Managers expressed the fact that this issue contributed to a dehumanized and impersonal customer experience that results in negative customer impression. Some participants highlighted that customers often perceive AI systems as cold, robotic and devoid of delicate features of human communication. The lack of empathy is believed to cause reduced satisfaction and distrust in the system, which results in the customers' general reluctance to use the system. This also tends to leave them with negative sensitivity. This was highlighted by one of the participants:

> . . . the cold feeling of dealing with a machine, the distress when the customer hears a machine or nonhuman voice (Participant 1).

The participants note that this feeling leads customers to focus more on the superficial features of the system. that is, the technical and design aspects. They become more sensitive toward these aspects compared to the case of ideal empathic interactions with the organization.

> . . . the unemotional feeling makes customers focusing more on the superficial features like the design . . .., so they will be more sensitive to these aspects (Participant 2).

Another participant noted that customers want to feel understood as human individuals, not just as a collection of data points. The narratives indicated that regardless of how sophisticated the AI system is, it can fail to capture the emotional side of the relationship between the customers and the organization.

This is consistent with the findings in the existing research (Ho and Chow, 2024; Montemayor *et al*., 2022; Pelau *et al*., 2021). Emotional intelligence is important in building trust and fostering relationships with customers. Davis (1983) defined empathy as a psychological phenomenon in which individuals respond to the observed experiences of others. It is considered a crucial element of human interaction (Bove, 2019). It enables individuals to recognize and react to another person's emotions without directly experiencing the stimuli that triggered them. Theoretically, empathy is rooted in the theories of social cognition and emotional intelligence, which is about understanding others' perspectives, connection and social interactions. Empathy is not merely emotional sharing but also includes cognitive aspects which are vitally important in building trust and relationships, such as understanding social cues and perspective taking (Goleman, 2020; Keysers and Gazzola, 2006). Empathy in service encounters extends beyond the basic transaction, acting as a powerful tool for fostering service innovation (Windahl, 2017).

Marketing managers realize that their customers are concerned about whether AI can truly understand the nuances and motivations behind their consumption choices (Kim and Duhachek, 2018). This stems from a fear that their unique needs and preferences might become overlooked by algorithms (Longoni *et al*., 2019). This is also linked to the inherent difficulty in designing AI systems that can replicate nuanced understanding that human agents can express in customer interactions (Huang and Rust, 2021). AI is perceived as lacking the human-like qualities needed for positive customer interactions (Davenport *et al*., 2020; Luo *et al*., 2019). This finding aligns with the Uncanny Valley perspective, which suggests that AI systems that appear almost human-like but imperfect or inconsistent can potentially evoke discomfort and reduce user trust (Kätsyri *et al*., 2015).

Explainability of algorithms

Another key factor that emerged from the data was algorithmic opacity and the perceived lack explainability of AI algorithms and decision-making processes. "Algorithmic opacity" refers to the lack of visibility or transparency surrounding the decision-making processes of AI algorithms (Paudyal and William Wong, 2018). Participants explained that customers often are skeptical about the "black box" nature of AI, fearing that their personal data are being used in ways they do not fully understand. They discussed that this ambiguity results in a feeling of fear since they cannot understand how exactly the system works, which makes them feel that they have no control over the process. This eventually leads to them developing distrust of the system:

> Customers want to know how the AI system makes decisions about them. If the way these algorithms work is not explained, they feel like their personal information is being manipulated in ways they can't control (Participant 9).

Our research findings are consistent with the prior research (Eslami *et al*., 2019; Naher *et al*., 2019), which indicated the negative impact of system ambiguity on trust and perceptions of AI-based systems. Algorithms are often described as "black boxes" due to their opaque nature, particularly regarding the utilization of personal data and selection parameters (Robert *et al*., 2020). Transparency and explainability are crucial for understanding the logic behind algorithmic judgments and can help mitigate concerns surrounding algorithmic opacity (Robert *et al*., 2020).

Encryption and privacy issues

Focusing on their customers' concerns about their privacy and data protection, the participants highlighted the fact that their customers are increasingly becoming vigilant of how their personal data are being collected, used, shared and secured by AI systems. One of the main concerns of the participants is that customers feel their data are being exploited or used by a third party, which makes them feel uncomfortable. This eventually makes them reluctant to engage with AI-driven technology or even interact with the organizations via AI-based channels:

> Customers are being bombarded with personalized ads and recommendations, and they often feel like their privacy is being invaded. They often want to feel in control of their data and how it's being used (Participant 4).

While hyper-personalization offers personalized choices and suggestions for customers, the respondents argued that it can be concerning, because it makes customers feel that their privacy is invaded. Respondents pointed out that customers experience the service process as if an "invisible hand" was controlling the process for them. This is related to existing research findings that AI-based suggestions can be simply irrelevant to customers (Skillius and Jacobsson, 2024), which causes customers to "feel not important to the organization" or to feel the system is "not functioning properly".

Marketing managers also noted that their customers "might feel exhausted by overwhelming hyper-personalization" or "might become too distracted". These findings are aligned with the existing literature (Dinev *et al*., 2016; Kronemann *et al*., 2023; Müller-Seitz *et al*., 2009), which indicates the importance of the concerns the users of the AI-based technologies have regarding their data privacy and over-personalization. Customer perception plays a crucial role in the acceptance of new technologies. However, privacy concerns can significantly hinder this acceptance (Müller-Seitz *et al*., 2009). This often stems from a sense of perceived intrusiveness experienced by customers (Kronemann *et al*., 2023), primarily fueled by factors such as data errors, collection of personal data, unauthorized access to personal information and secondary use of data (Dinev *et al*., 2016).

Respondents indicated that the exists a danger that their customers could develop a belief that AI probes too deeply into their personal affairs, which might lead to concerns about privacy violations and strengthen the idea that AI is intrusive and frightening. While hyper-personalization is a notable benefit of AI in marketing (Ho and Chow, 2024), it can have negative consequences if it becomes excessively invasive or appears too calculated. This finding extends Digital Leviathan theory by demonstrating how perceived data intrusiveness reinforces managerial concerns about loss of control and institutional power embedded in AI systems.

Engagement

Participants highlighted thew fact that AI-based interactions may reduce the human involvement, leading to concerns about human oversight and the feeling of detachment. In our context, AI-mediated interactions between consumers and organizations (through chatbots, virtual assistants and personalized recommendation systems), facilitate communication between consumers and organizations (Ho and Chow, 2024). This interaction can take various forms, such as chatbots, virtual assistants or personalized recommendations, and aims to enhance customer experience and support decision-making processes. Several participants noted that over-reliance on AI systems can lead to a perceived lack of human interaction and oversight, which can further contribute to the perception of monstrosity:

> Customers want to know that there are real people behind the AI system, who can address their concerns and provide a more personalized touch. Without this, the AI can feel impersonal and untrustworthy (Participant 1).

Another participant mentioned the word "scary" and described their feeling as "isolated" when dealing with the AI-based system that lacks the human touch.

> Nonhuman interactions are less joyful and might affect the use of the system in the future (Participant 11).

Another participant said that the impersonal interaction is "less joyful" and makes them "feel unappreciated" which might lead to disloyalty in the future.

> AI-based system or communication can make customers feel unimportant and unappreciated, which can make customers disloyal, talking with the agent has a social or human aspect that can't be replaced with algorithms (Participant 12).

Our findings are in line with the current literature, for example Liu-Thompkins *et al*. (2022), who suggested that human-like characteristics in AI-driven customer service interactions (e.g. social presence, empathy and personalization) significantly influence the quality of interactions and customer trust. The absence of these characteristics leads customers to feel that the system is less capable of understanding their needs. This can be explained by the lenses of the social presence theory (Short, 1976), which posits that different communication mediums vary in their ability to foster a sense of interpersonal connection or immediacy, and their ability to convey a sense of social presence. This theory implies the importance of integrating social elements into AI-powered conversational agents. This can be seen in a study by Luo *et al*. (2019) who found that customers perceived a human agent differently than the AI agent when purchasing from a website. They perceived the human agent as more knowledgeable and empathetic than the AI agent. The constant bombardment of personalized content, especially when it lacks the nuance of human understanding, can contribute to a sense of digital overload (Kumar, 2019). The information overload can lead to information disorganization and can increase the perceived risk and eventually increase customer uncertainty (Soto-Acosta *et al*., 2014).

Efficiency and empathy in AI: a proposed framework

As discussed earlier, we propose a framework that explains the managerial concerns about humanizing AI systems in terms of efficiency versus empathy. Our framework (Figure 2) suggests that focusing on efficiency could result in neglecting empathy and vice versa.

Figure 2 shows that the proposed framework suggests that an AI system can fall under one of the four categories.

(1) *Ideal system*, that is the system is highly efficient and highly empathetic. This is the ideal situation where the system excels in both functionality and human-like interactions.

(2) *Sentimental system*, where the system is highly empathetic but lacks efficiency. Although being able to handle emotional interaction, the system is not capable of achieving its focal purposes to a high standard. Therefore, the system here can be judged as overly sentimental.

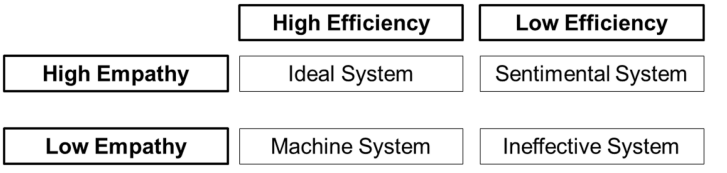

Figure 2. Categorization of AI systems based on empathy and efficiency. Source: Authors' own work

(3) *Machine system*, which describes a system with high efficiency but low empathy. The system is not perceived as empathetic but works efficiently. The system will be perceived as robotic, cold and spiritless.

(4) *Ineffective system*, where the system is both low in efficiency and empathy. Such a system is faulty, and it is unlikely to achieve its proposed goals.

Strategies for humanizing AI in marketing activities

Based on the insights obtained from the participants, we identify several strategies for organizations to humanize their AI systems and overcome the Leviathanian perception among customers. The following strategies are directly derived from the four identified dimensions and are presented as managerial responses to the specific concerns associated with each dimension. Each set of strategies corresponds to one dimension, providing practical ways to address the underlying issues identified in the findings.

Emphasize emotion-driven empathy

AI systems are becoming integrated into marketing practices, but these technologies require them to blend with the understanding of human emotions. Integrating empathy into AI systems is an emerging field of research that is focused on developing artificial empathy that can effectively mimic human emotions and understanding (Paiva *et al.*, 2017). As the findings indicated, customers expressed that they see AI systems as cold, robotic and lacking human touch. A sense of diminished empathy results in customers behaving unnaturally, while making fewer purchases (Davenport *et al.*, 2020; Luo *et al.*, 2019).

While customers consistently respond more positively to human agents, while feeling more comfortable and understood, they perceive AI-driven services as less personalized and empathetic (Liu-Thompkins *et al.*, 2022; Raj *et al.*, 2023). The participants suggested that organizations should focus on developing AI systems that can better understand and respond to the emotional needs of their customers. Realistic human interaction as a choice should be made available for customers who do not feel comfortable interacting with an AI-based agent. One of the participants stated:

> Technologies are more advanced than any other time before, AI platforms should be designed to imitate human emotions (Participant 2).

Another participant highlighted that:

> With machine learning, the system is learning how to solve problems and should be learning how to act emotionally in a way similar to human empathetic reactions (Participant 1).

A conventional AI system could incorporate empathetic language or tone. The quotes suggest the creation of more meaningful connections with customers through emotional entanglement which aims to sense, interpret and respond to human emotions. It should be designed to involve human emotions into human-machine interactions (Davenport *et al.*, 2020; Hildt, 2024; McDuff, 2022).

Increase transparency and explainability

Participants highlighted the importance of improving the transparency and explainability of AI systems. A participant suggested:

> Organizations should provide clear explanations of how the AI systems work, what data is being used, and how decisions are being made, an educational campaign should be designed to achieve this purpose (Participant 7).

Other participants also pointed out that the most important aspect is how the data are being collected and what data are being collected. They said that this is vital for building and maintaining trust between their organization and their customers. They also argued that this could be achieved through informing customers about what is happening in such a way that they have a perceived sense of control over interaction processes. Explaining how the AI system works helps organizations to achieve higher levels of transparency (Robert *et al.*, 2020).

Prioritize privacy and data protection

Participants emphasized that organizations must prioritize customer privacy and data protection as they implement AI systems. They underlined the importance of balancing personalization with data privacy as this issue might impact customer trust in the system. Participants also highlighted the importance of finding mechanisms that give customers control over their data and clarity over the data collection and usage practices. A participant explained that:

> The fear sometimes comes from the customers' feeling that they can't control the process, ... an increased sense of control decreases fear (Participant 9).

Implementing strong data security measures and communicating the strength of protection systems is vitally important to customers and might lead to "customers' relief". This leads to customer trust and a favorite response. Transparency contributes positively to privacy and leads to a humanized perception of the system. Since AI utilizes large amounts of personal data to enhance customer experiences and channel unique customer journeys, it tends to raise concerns about data protection and user privacy. Customers are likely to end up with a feeling that the high level of personalization of an AI system violates their consumer rights. They might also feel their personal information is being exploited for various covert purposes. That is why privacy and data protection are becoming vitally important to understanding users' perceptions of AI systems (Lim and Shim, 2022).

Minimize impersonal interactions

Finally, participants highlighted the importance of maintaining a balance between AI-powered interactions and human oversight. The option to have human-driven interactions rather than a sole machine option is one of the possible ways organizations could approach this dilemma. Customers should have the option to easily talk to a human representative if needed. This could lead to customers feeling more appreciated and having more trust in the system, which leads to alleviating the Leviathanian perception of the system. One participant suggested:

> Giving customers the option to talk to a real person is a good idea. I often stop asking for help even before I start on some websites when I don't see the option to talk to a person. I don't believe the chatbot has the capacity of addressing the issue with the same precision as the human representative, which is something I also witnessed with our clients and customers (Participant 6).

Our findings suggest that feedback is processed by the experts to ensure that the AI system is used properly and monitored to be used in the right amount in the right context with the right audience. Achieving the balance between AI powered interaction and human intervention is critical and identifying the touchpoints where empathy can have the biggest impact is crucial (Verhoef *et al.*, 2021). This positions managers to be more empathetic and responsive to customers' preferences. By implementing these strategies, organizations can work to humanize their AI systems and overcome the Leviathanian perception (see Table 2). Each group of strategies in Table 2 corresponds directly to one of the four dimensions, reinforcing the link between identified concerns and proposed managerial responses.

This theoretical mapping shows practical strategies proposed by marketing managers in their response to the fears and concerns outlined in Digital Leviathan theory. By recognizing

Table 2. AI humanization strategies mapped to the four dimensions

Dimension	Managerial strategies for humanizing AI systems
Emotion-driven empathy	• Offering a choice of human interaction • Incorporating empathetic language or tone into AI interactions
Explainability	• Ensuring transparency in interactions • Explaining to customers how the data are collected and managed • Maintaining control over how interactions are managed
Encryption Issues	• Balancing personalization with data privacy • Giving customers control over their data • Implementing strong data security measures and communicating the strength of protection systems
Engagement	• Achieving the right balance between AI powered interactions and human intervention • Processing feedback by experts to ensure that the AI system is used properly • AI is used in the right amount in the right situation with the right audience

Source(s): Authors' own work

AI systems as not only technical tools but also socio-political actors in consumer life, these strategies act as safeguards that ensure AI systems remain aligned with human expectations and emotional norms. To further ground the suggested strategies in theory, we connect each one to the foundational assumptions of Digital Leviathan theory. These parallels help clarify how the strategies address key concerns under the Digital Leviathan framework.

To deepen the theoretical contribution of this study, Table 3 links the identified managerial strategies to the underlying assumptions of the Digital Leviathan theory. This mapping

Table 3. Humanization strategies as responses to Digital Leviathan dynamics

Managerial strategy	Explanation
Emotion-driven Empathy	Digital Leviathan perspective views AI-based systems as dehumanized and robotic, that cause anxiety and isolation. Integrating emotional cues and mimicking human sensitivity and reactions might restore the sense of humanity in AI-based systems, thus making users more comfortable engaging with these systems. Digital Leviathan theory predicts that the monstrous image of the system becomes milder when it starts assuming the emotional touch of humanized governance
Explainability	The opacity of backstage operations causes customers to fear the unpredictable power of the system. The explainability of the system restores the social contract between the AI and users, echoing Hobbes' Leviathan (where order is upheld through mutual understanding and predictable rules), where user anxiety can be reduced, and trust can be fostered. Eventually, users may voluntarily engage with the AI system, as they believe it is fair, governed by rules and works in their best interest
Encryption issues	The attrition of the individual agency against the presence of digital systems is one of the major concerns in the digital Leviathan. The privacy concept should reflect a bounded Leviathan that functions under limits that both parties agree on, thus calling for a system that is not all-consuming "surveillance monster". By this, managers introduce ethical boundaries and give clear control on how customers' data are gathered and handled
Engagement	Digital Leviathan theory highlights the issue of over-automation that impacts the social and relational warmth. Therefore, it leads to the rise of the image of mechanized Leviathan lacking human judgment and interpretation. Maintaining the balance between a powerful mechanical system and human judgment is crucial. Promoting engagement through more natural, human-like AI communications and enabling seamless access to human agents helps organizations preserve the humanized element within AI systems. Consequently, it will restore a sense of relational balance and maintain legitimacy that supports humanized governance

Source(s): Authors' own work

illustrates how each strategy functions as a mechanism to mitigate perceived algorithmic power, restore user trust and reintroduce human-centered governance into AI-driven marketing systems. This mapping demonstrates that humanization strategies are not merely operational responses, but represent structured managerial attempts to tame the perceived "techno-monster" by balancing control, transparency and emotional engagement within AI systems.

Hamel (2009) warns that the organizational initiatives of humanization cannot be just for show, or a purely symbolic exercise. Being empathetic or transparent can make a system seem less intimidating for users, but they do not necessarily alter underlying power or accountability structures. When humanization serves only to soften perceptions without changing managerial control, it risks reinforcing Leviathanian dynamics. The strategies identified here should therefore be understood as organizational commitments rather than merely technical design choices.

Discussion

This section explores the effectiveness of mitigating the Leviathanian feelings of users and market actors concerning AI systems. Here, we attempt to provide some insights on how AI can be designed to enhance users' perceptions about AI systems. In general, we note that, in contrast to existing theories, Digital Leviathan theories can help firms make AI more palatable to customers by identifying and addressing the key concerns around trust, control, transparency and accountability. Since the Digital Leviathan framework deals with the balance of power and order in digital spaces, marketing managers can use its principles to design AI systems that seem more empathic, fair, transparent and secure by aligning their narratives with customers' expectations of control and predictability.

The findings also invite reflection beyond the design of AI systems toward the humanization of management itself. In his article "Moon Shots for Management", Hamel (2009) conceptualized management as a tool used and optimized over a long-term for efficiency and control. This concept is similar to the managers' Leviathanian anxieties as presented in this study. By the same token, AI does not introduce dehumanization in itself, rather, it amplifies the existing bureaucratic logics of control, opacity and surveillance. Humanizing AI therefore necessitates reconsidering how organizations coordinate human effort, allocate authority and exercise stewardship in AI-mediated environments. Recent work also emphasizes the central role of individuals and managerial agency in shaping how emerging technologies are interpreted and enacted within organizations (Modarelli *et al.*, 2025). Our findings highlight humanization as a managerial and organizational process, not a technological one.

Directly addressing the issue of digital leviathan

It is important to illustrate how the Digital Leviathan manifests in everyday marketing activities. Its features can be observed in algorithmic recommendation engines, automated customer service chatbots and predictive analytics tools (which operate with limited transparency and high levels of autonomy). For example, recommendation systems used by e-commerce platforms often make decisions based on complex data processing mechanisms that remain opaque to users, reinforcing perceptions algorithmic dominance and lack of control. Similarly, AI-powered chatbots that handle customer inquiries without human intervention may be efficient but simultaneously contribute to feelings of impersonality and emotional detachment.

Humanization requires translating these abstract concerns into concrete organizational practices. For example, firms can implement explainable AI features that provide users with clear and accessible explanations of how content is generated. Also, organizations can adopt a model where customers are given the option to escalate interactions to human agents when

emotional sensitivity or complex problem-solving is required. Additionally, AI systems can be designed to incorporate adaptive communication styles, allowing interactions to reflect empathy, tone variation and contextual awareness.

Although integrating AI marketing practices has revolutionized the industry and offered enhanced capabilities in data analysis for organizations, it brings challenges for marketing managers (Huang and Rust, 2021). These challenges lie around tackling customers' distrust and perception around AI applications, stemming from a perceived lack of human touch and personalized understanding (Mayahi and Vidrih, 2022). Marketing managers are facing customer scepticism exhibited towards AI-dominant interactions (Mende *et al*., 2019).

The Uncanny Valley Theory provides one of the possible explanations of the discomfort and negative perceptions that customers may have towards AI in marketing (Zhang *et al*., 2020). This theory suggests that non-human entities (including AI-based systems) are becoming more human-like but failing to replicate authentic human behavior (Ho and MacDorman, 2010; Zhang *et al*., 2020). This research adds some nuance to this debate by arguing that Digital Leviathan theories explain when and how the AI system, the techno-monster, can be made more palatable. Customers' fears of "monstrosity" can be assuaged if firms provide guarantees of order, structured governance, stewardship and predictability. AI systems should make customers feel comfortable with machines by indicating that human operators are controlling the design and processes of the whole system.

From the perspective of this study, the Digital Leviathan conceptualizes AI systems in marketing as socio-technical governance actors rather than neutral technological tools, whose authority emerges from algorithmic decision-making and institutionalized system control rather than direct human discretion (Langford, 2020). In simple terms, the Digital Leviathan can be understood as an invisible but powerful system that shapes decisions and interactions in ways that users cannot fully see or control, much like an unseen authority guiding outcomes behind the scenes. Hence, marketing managers do not only evaluate the AI-based system solely on the technical and functional aspects, but through the anxieties and concerns it generates, which eventually shape the trust judgment (Glikson and Woolley, 2020). In this context, these anxieties collectively give rise to negative perceptions of AI as a market based "techno-monster" rather than as a supportive decision-making tool (Hoffman, 2020).

Imbuing digital Leviathan with empathy

In this context, a key challenge for organizations is striking a balance between the technicality of AI implementation and a human-centric approach. The key goal of AI applications is to enhance and improve human interactions, rather than replacing them entirely (Liu-Thompkins *et al*., 2022; Vlačić *et al*., 2021). Because AI applications are algorithm-driven, they might not be able to demonstrate real empathy or comprehension in interaction with humans.

Artificial intelligence technologies may struggle to replicate the nuanced understanding and sympathetic answers that define superior human customer service, even when equipped with advanced capabilities (Sidlauskiene *et al*., 2023). Consequently, individuals might be more cautious when interacting with the company, especially when AI is used for tasks that require intuition or subjective judgment (Castelo *et al*., 2018; Davenport *et al*., 2020). Despite challenges with AI empathy, marketing managers can develop and promote narratives about empathy-driven marketing practices overseeing the design and implementation of AI systems. This can be supported by the examples of human agents working in sync with AI systems in responding to customer needs based on AI-driven analyses, while engaging with them on a deeper emotional level (Huang and Rust, 2021).

The past research shows that the emotional and social aspects of customer interactions (subjectivity, intuition and affect) should not be left to AI systems (Lemon and Verhoef, 2016; Castelo *et al*., 2018; Hicham *et al*., 2023; Liu-Thompkins *et al*., 2022). Our findings in light of theories of Digital Leviathan suggest that a cascaded approach might work better: AI should

act as the first layer of interaction resolving routine, data-driven and technical inquiries efficiently, while human agents can intervene when emotions, deep social understanding or critical decision-making are required. Trust in "Leviathan" can be enhanced through the avoidance of forced use of AI when human help is needed. Customers can be nudged to develop a belief that they have a clear path to reach a human agent if AI is insufficient. In the process, AI can be enabled to identify negative sentiment signals (e.g., frustration, confusion, distress) and escalate these issues automatically.

Incorporating transparency to promote the digital Leviathan effect

The growing use of sophisticated AI algorithms in marketing interactions raises concerns about transparency for customers. This lack of transparency in AI decision-making processes and algorithms raises suspicions that their data and preferences are being exploited, especially when they cannot understand the algorithms fully (Liu-Thompkins *et al*., 2022). Managers should understand that it can be complicated and incomprehensible for the average customer to understand the algorithms due to their complexity and opacity, which can create a situation of unease or fear (Eslami *et al*., 2019). It is the duty of marketers to develop AI systems that enhance transparency and to ensure that customers understand the logic behind the algorithms of the AI-based system, this is crucial in mitigating the fear and building trust (Schmidt *et al*., 2020).

Algorithmic opacity and the lack of explainability raises significant concerns around accountability, because responsibility cannot be determined if algorithmic decisions lead to an unwanted outcome (Lu, 2020; Robert *et al*., 2020). Furthermore, dynamic machine learning algorithms can make their behavior unanticipated over time, algorithmic transparency and explainability are becoming more and more important when AI is included into systems geared to maintain safety, fairness and trust. The role of algorithm opacity is vitally important for trust in AI-powered systems, where transparency is important in fostering customer trust in the system (Floridi and Taddeo, 2016; Scharowski, 2020).

The level of algorithmic opacity and transparency not only influences the users' perceived human likeness and the level of trust in the system, but it also influences the user's perception of how the system is fair or biased (Bar-Gill *et al*., 2023). Accordingly, it is crucial for managers to address this issue to guarantee trustworthiness of AI-based systems, and to understand how users view AI-based systems and how they form their opinions (Bar-Gill *et al*., 2023; Scharowski, 2020). Based on this understanding, recent work on the explainable AI (XAI) complements the Digital Leviathan framework by highlighting the interpretability and transparency as foundational mechanisms for trust formation with AI system (Arrieta *et al*., 2020; Rai, 2020). However, while the XAI focuses on reducing uncertainty level with the system, the present study foregrounds managerial perceptions of power, control and socio-political agency, suggesting that trust in AI is shaped by broader concerns beyond usability and cognition (Glikson and Woolley, 2020).

Socio-technical theory posits that technical systems (technology, processes, tools) cannot be fully effective without the input from social systems (people, culture) (Baxter and Sommerville, 2011). In contrast, Digital Leviathan theories advocate that AI systems can be presented as predictable rule-based governance systems to customers. Human input would not be required within the boundaries of a specific interaction if AI systems are trained to make decisions that are understandable and fair. Users often reject AI decisions because they feel they are arbitrary, opaque or unfair. To address this issue, businesses should adopt explainable AI, which allows users to understand how AI reaches a conclusion. For example, if an AI system denies a specific service, it should provide clear, human-readable reasons rather than an unexplained rejection. Hence, an AI-system can autonomously operate within limits, because they would be following unified guidelines and ethical standards. Marketing managers need to channel communications to fight ambiguity by highlighting clear rules and objective criteria.

Privacy concerns and hyper-personalization: precision or intrusion

In the era of AI-based personalization, balancing privacy and data sharing is a critical and complex topic as sharing personal data holds immense benefits for customers from increasing satisfaction and improving customer experience. This raises privacy concerns and fears of the exploitation of their data, this might lead to lack of trust and inhibit the adoption/use of these new technologies. Hyper personalization can feel overly intrusive and might cause customers to feel discomfort, as AI seems to know too much about them. Even though this means more accurate recommendations and responses, customers might react negatively to that, often perceive AI powered system as an invasive force rather than a helpful assistant.

Many theories discuss the topic of balancing privacy and data sharing, such as the Privacy Calculus Theory (Dinev and Hart, 2006), the Privacy Paradox (Joinson *et al*., 2010) and the TAM (Li *et al*., 2010). These theories provide different perspectives on how to set the right balance between privacy and the perceived advantages of data sharing in AI-enhanced experiences.

From the Digital Leviathan perspective, AI systems must strike a careful balance between personalization and respect for individual privacy to maintain consumer trust and acceptance. Marketing managers should be tasked with addressing the balance between privacy and personalization, as proper handling of this issue can achieve efficiency and tailor customer experience. A key tension in Digital Leviathan theories is the balance between control and individual autonomy. While AI systems are often designed with automation and efficiency in mind, too much automation can remove user control and create frustration. AI should empower users rather than dictate decisions, allowing them to shape their interactions and maintain emotional agency.

Digital Leviathan emphasizes the undesirability of the customer perceptions of excessive control. Therefore, marketing managers must engage narratives portraying customers possessing more control over AI interactions (e.g. customizable AI settings, ability to opt out of AI-driven decisions). A solution is to integrate customizable AI experiences, where users can adjust AI's communication style to match their emotional preferences. For instance, toggling between AI settings such as "supportive and conversational" versus "direct and concise" allows users to choose an AI interaction that feels most comfortable to them. Similarly, an AI-driven customer service chatbot could allow users to request a human representative whenever they feel the AI lacks sufficient emotional depth.

Impersonal interactions and information overload

It is important for organizations to achieve the right balance between personalization and maintaining a personal touch in customer interactions. The excessive use of AI leads to an impersonal and dehumanized experience which has an impact on customer trust and engagement (Hicham *et al*., 2023). Marketing managers struggle with impersonal interactions, the lack of human warmth may lead customers to feel disengaged. This can result in a customer experience that feels cold and detached. Unlike the hyper personalization issue that stems from AI knowing too much, the impersonal AI interactions issue emerges when AI fails to communicate in a human-like, emotionally intelligent and relatable manner. Users who expect human-like interactions feel frustrated when they face robotic and mechanic interaction with AI powered tools, such as Chatbots and virtual assistants.

The theory of Media Richness can be employed to understand this feeling of impersonality, where the very premise of this theory is that the effectiveness of the communication depends on the mediums ability to carry "rich" information. This is what AI struggles to do if compared to human interaction, which eventually leads to a perception of impersonality about communication (Daft and Lengel, 1986).

While AI interactions are meant to optimize the personalization and achieve efficiency in the interaction, it strips the communication from its human touch. Hence, organizations may unintentionally cause a detached and disengaged experience. This dilemma highlights the

digital leviathan paradox, and the tension between human connection and digital technologies in customer service. This framework suggests that AI powered interactions lead to cold and robotic communications, that prioritize efficiency and data analytics over emotional touch. This requires a fine equilibrium, as this issue could erode trust and affect satisfaction and loyalty.

Our research findings should also be interpreted in the light of the cultural and economic context of Jordan as an emerging economy. In these contexts, control, trust and data privacy concerns may be more pronounced due to varying levels of technological familiarity and regulatory maturity. This may amplify Leviathanian perceptions of AI systems compared to more technologically mature markets. The proposed humanization strategies may be more relevant to the emerging market settings, where establishing trust and transparency is critical for AI adoption.

Conclusion

This study was designed to examine how marketing managers perceive AI-powered systems through a Digital Leviathan perspective and how they seek to humanize these systems in practice. The findings show that managers experience AI as a source of efficiency but also of control-related anxiety, which they address through four humanization strategies: emotion-driven empathy, greater algorithmic transparency and explainability, strengthened privacy and encryption safeguards and human oversight to sustain engagement.

In conclusion, the integration of AI technologies has great potential to improve marketing practices and enhance customer experiences. However, marketers face significant challenges when employing AI into their marketing practices, that is the "monstrousity" perception of AI systems. As AI is defined as an imitation of human intelligence, it also needs to have an emotional empathetic aspect. Therefore, businesses should find ways to humanize AI ensuring that the processes incorporate empathy, provide transparency and respect privacy concerns. Designing an empathetic system that is capable of emotional intelligence, which incorporates human-like emotions, enhancing the transparency on how the system algorithms work, providing the option to interact with a human agent and reducing the information overload. These strategies can bridge the gap between advanced technology and human expectations of interaction, which ultimately improves trust and loyalty in the AI-powered system.

Theoretically, this study identifies four dimensions: (1) emotion-driven empathy; (2) algorithmic opacity and explainability; (3) encryption and privacy concerns and (4) engagement. These dimensions shape how managers understand and deploy AI-powered systems. Together, these dimensions highlight a tension between efficiency and control afforded by AI systems. These findings extend the Digital Leviathan framework by illustrating how AI-based systems function as instruments of governance characterized by opacity, automation and power. The emphasis on empathy, explainability and privacy can be seen as an attempt to tame the Leviathan by affirming human values and relational norms inside of the algorithmic system. The interpretations and theoretical implications discussed above are grounded in the empirical results presented in the findings section.

The managerial implications of this research are significant. They highlight strategies to humanize AI-driven technologies and make them more relatable to customers, which include enhancing emotional intelligence and emotional learning in AI systems, dealing with the opacity issue, improving transparency and explainability, addressing privacy concerns, offering a balance between personalization and transparency. These insights can guide marketing practitioners to properly integrate AI systems into customer interactions, thereby reducing negative perceptions and fostering trust and loyalty. These implications should not be seen as purely technical design prescriptions. They reflect deeper governance issues surrounding power, agency and responsibility in AI mediated markets. Managerial responses to the Digital Leviathan must be evaluated not only in terms of effectiveness but also in terms of their ethical and organizational consequences.

This paper contributes theoretically by applying Digital the Leviathan theory to interpret marketing managers' experiences with AI. This theory explains managers' experiences and attempts to restore balance in the relationship between human agency and machine. Thus, this work enriches existing literature by introducing AI not only as a technological innovation, but as a social force that is rooted through control, empathy, transparency and engagement. This paper introduces conceptual lenses for the understanding of AI-human interactions in marketing contexts. By aligning the Digital Leviathan theory with Hamel's call to humanize management, this study suggests that the challenge of AI in marketing is not only technological but fundamentally organizational, calling for management systems that prioritize human values alongside efficiency.

However, the study has some limitations that may provide avenues for future research, such as its focus on marketing professionals within a specific cultural context (Jordan), which may limit the generalizability of results. Additionally, the qualitative approach used provides in-depth insights but may not capture the full spectrum of perceptions across different industries or consumer sectors. Future research could extend the current framework through comparative investigations between business-to-business and business-to-consumer settings, where the roles and strategic implications of AI-based systems are substantially different (Longoni and Cian, 2022). Cross national studies that compare emerging and developed markets would help assessing the boundaries of the Digital Leviathan framework, thus enhancing the generalizability of the identified managerial concerns. Future research could expand its focus into a multi-stakeholder perspective, incorporating the views of customers, system designers and policy makers to capture a more holistic and inclusive understanding of AI humanization and governance. Moreover, future research may test the proposed strategies in real-world AI–human interactions to assess their effectiveness in mitigating techno-anxiety and fostering trust in AI-mediated marketing interactions.

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