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Transforming Marketing Communications: Exploring the Impact of Generative AI on Marketing Communications within Large IT Enterprises

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Executive Summary

The marketing landscape is rapidly transforming due to artificial intelligence (AI) advancements, especially generative AI (GenAI) tools. They enable quick creation of tailored, high-quality content, enhancing audience engagement. However, with GenAI advancements come both promise and concern. Thus, balancing technological development with ethical standards is crucial to ensure AI-generated content reflects values and builds public trust. Existing research overlooks the influence of emerging GenAI tools on companies and different departments, despite their increasing adoption. The contrast between potential benefits and drawbacks of this technology emphasizes the urgent necessity for examining its impact on the current business landscape and raising awareness of ethical considerations.

In response to the identified gap in existing literature, this study explores how GenAI influences marketing communications in large IT enterprises, focusing on current usage, ethical principles, and impacts on marketers' performance. Insights from professionals were gathered through semi-structured interviews and analyzed with thematic analysis. Socio-technical system theory and the task-technology fit model shaped the theoretical framework of this research. The research revealed that GenAI is currently used in marketing for micro-scale tasks. Large IT companies support this integration with training and resources, leading to perceived increases in productivity and efficiency. However, restructuring work processes has not yet occurred. Furthermore, ethical concerns are significant, with many marketing professionals prioritizing brand protection and data confidentiality. There is a gap in employees' awareness of specific AI regulatory guidelines, necessitating improved training. The study found that GenAI enhances marketers' performance by fitting well with their tasks, supported by user expertise and specialized training. Nonetheless, human oversight remains crucial to ensure content quality and alignment with corporate guidelines.

Through its analysis, the study offers insights for optimizing marketing communications strategies and navigating GenAI's ethical complexities, aiding practitioners, academics, and businesses in making informed decisions. It helps marketing professionals adapt to AI-driven methodologies, emphasizes ethical considerations, and guides future research, enhancing public trust, data security, and preventing misinformation.

1. Introduction

In the realm of modern marketing, the emergence of GenAI has the potential to present a paradigm-shift. By leveraging machine learning and AI algorithms, companies can now produce a wide array of high-quality content in the blink of an eye, ranging from blog posts and social media updates to videos and advertisements. This technology enables companies to tailor content to specific target audiences, leading to more engaging and personalized interactions. As businesses seek to remain competitive and engage with their audiences effectively, understanding the profound impact of GenAI on marketing communications (MarCom) becomes a pivotal research endeavor.

Existing research lacks insights into the impact of emergent GenAI tools on industries, despite their growing integration. While many studies focus on education, the effects of these tools on companies and operations are understudied. This research centers on MarCom, an area significantly influenced by GenAI, aiming to fill this gap by shedding light on its usage, impacts, and ethical considerations.

Moreover, this study uses Socio-Technical Systems (STS) and Technology-Task Fit (TTF) theoretical frameworks. While most STS studies are conducted in manufacturing and industrial settings, there are limited studies examining marketing as a more tangible area within this framework. Additionally, there is a scarcity of research combining STS and TTF principles, despite their connection across various contexts. This research makes a connection and uses elements from both these frameworks to gain a deeper understanding of the topic.

1.1. Research Questions

1. How does GenAI influence MarCom in large IT enterprises?
    - 1.1. What is the current usage of GenAI in MarCom?
    - 1.2. How do marketing professionals consider ethical principles when integrating GenAI into their marketing efforts?
    - 1.3. How does GenAI affect marketers' performance?

1.2. Research Objective

In response to the identified gap in existing literature, this study aims to achieve several key objectives. The primary objective of this study is to comprehensively explore and analyze the impact of GenAI on MarCom strategies within large IT enterprises. By addressing research questions, the study intends to contribute valuable insights to the integration of marketing and technology. Moreover, ethical considerations in this area represent a critical focus of this research. It aims to contribute to the development of guidelines and training material for responsible GenAI utilization in marketing. This can ultimately help increase public trust, enhance data security, and avoid misinformation.

The study also involves how GenAI is affecting marketers' performance. The insights gained from this research are expected to guide marketing professionals, business leaders, and researchers in optimizing marketing practices and navigating the evolving landscape of AI-driven approaches.

1.3. Research Relevance

1.3.1. Scientific Relevance

This research adds to our understanding of the evolving marketing landscape through GenAI. First, it advances knowledge by addressing the gap in existing research. While emergence of ChatGPT has generated significant interest towards GenAI tools, their impact on marketing is still unexplored (Zhou et al., 2023). The study provides an analysis of how these technologies influence marketing practices and businesses.

Second, the research critically examines the role of ethics in the implementation of GenAI. It highlights the importance of ethical considerations in the development and use of AI tools, thus guiding future research about ethical frameworks for these technologies. Third, it empowers professionals with the practical knowledge needed to make informed decisions about incorporating GenAI into their strategies, thereby advancing the field of marketing. Ultimately, this research presents a novel theoretical framework, using STS and TTF elements, aiming to inspire future studies with a fresh perspective.

1.3.2. Societal Relevance

In today's digital age, where information and communication are paramount, marketing plays a crucial role in shaping public opinion and influencing consumer choices (Sama, 2019). As GenAI technologies become increasingly integrated into marketing, understanding their influence is imperative from a societal perspective.

Additionally, the use of GenAI in marketing raises important questions about the data security, transparency, and responsibility of content creation. It is necessary to assess how companies navigate these ethical challenges in their pursuit of marketing success. Addressing these ethical concerns is vital for ensuring that content produced through AI technologies aligns with societal values and expectations.

Finally, this study contributes to discussions about the evolving nature of work, and technology's impact on industries as businesses adopt this technology.

2. Literature Review

2.1. Introduction

AI agents powered by machine learning algorithms are quickly changing the business environment, attracting attention from researchers (Kopalle et al., 2022; Ma & Sun, 2020). While AI holds the promise of impacting numerous business aspects, some managers still lack a proper grasp of its capabilities, limitations, and functionalities (De Bruyn et al., 2020).

GenAI introduces a framework for AI to replicate human creativity, making it valuable in creative fields like advertising and marketing (Berg et al., 2023; Dwivedi et al., 2023). Recent research shows ChatGPT outperforming humans in some knowledge-based tasks (Gilardi et al., 2023). Nonetheless, there are many ongoing debates about the risks of GenAI, notably ChatGPT. Despite these concerns, GenAI is expanding, raising important social and ethical questions (Krzysztof Wach et al., 2023).

Before going to the next section, here is an outline of how this literature review is organized. It starts with the required definitions for this study, then delves into the key topics, including

usage, opportunities, concerns, regulations, and trust. It also provides a thorough review of the theories used in this research.

2.2. Definitions

As a starting point, this section provides the definitions of the main elements of this research, MarCom and GenAI. According to the American Marketing Association, MarCom is defined as "coordinated promotional messages and related media used to communicate with a market" (AMA, n.d.). Another definition is "the combinations of promotional tools, marketing channels, messages, and media that marketers use to communicate with their target customers" (Brooks, 2022).

The next step is defining GenAI. The absence of a globally accepted definition can lead to confusion, where even a basic decision tree model might be considered as GenAI (García-Peñalvo & Vázquez-Ingelmo, 2023). Thus, it is essential to clarify that in this research, GenAI is defined as "a technology that leverages deep learning models to generate human-like content (e.g., images, words) in response to complex and varied prompts" (Lim et al., 2023).

2.3. Usage and Opportunities of GenAI in Marketing

As this study's main focus is understanding the impact of GenAI and the way it is utilized in marketing, this section delves into the existing literature in this area. Advances in GenAI have prompted discussions about their potential effects on creative industries. These AI systems have the ability to produce original text, images, music, and various other content, which may lead to the automation of certain creative tasks. Advertising and branding fields are especially affected, as they heavily depend on creating original content and messages (Routray, 2024).

The potential of AI in digital marketing is prompting global searches for fitting organizational solutions (Verma et al., 2021). AI revolutionizes digital marketing by enhancing campaign creation, targeting, and evaluation. It offers significant opportunities for three key stakeholders: brands aiming for personalized communication, advertisers seeking effective strategies, and customers engaging with marketing content. AI enables innovative and relevant content creation based on analyzed data, enhancing advertisements, social media

posts, and email campaigns. Automated campaigns tailored to consumer preferences can boost purchase intention. AI delivers messages to customers in a non-intrusive manner, utilizing data like location and demographics to display appropriate content. This includes determining optimal times for email campaigns and social media posts, leveraging the power of programmatic advertising (Dwivedi et al., 2021).

Some researchers propose strategies for implementing Large Language Models (LLMs) and GenAI, which can lead to tangible return on investment and lower risk, even in the initial phases of adoption (Thukral et al., 2023). GenAI enables companies to enhance flexibility and creativity among marketers by offering new perspectives, thereby improving marketing content efficiency, product quality, and job satisfaction for marketers (Kar et al., 2023; Noy & Zhang, 2023). However, the effectiveness of new methods for creating marketing content, like any advancing technology, needs to be thoroughly tested across different situations to ensure success for businesses (Kar et al., 2023; Peres et al., 2023).

Nowadays, content has become a pivotal instrument in marketing and AI has a strong effect on its creation and curation (Kose & Sert, 2017). AI-generated content aims to enhance content creation efficiency, ensuring high-quality output at an accelerated rate (Cao et al., 2023; Rivas & Zhao, 2023). It plays a catalyst role for transforming the practitioners' endeavors in content marketing and market research (Chintalapati & Pandey, 2022). In fact, all stages of content marketing are affected by AI technologies (Hsu & Liou, 2021). Yet, AI's effectiveness will be maximized when employed to enhance human managers rather than replacing them (Davenport et al., 2020).

Using GenAI tools such as ChatGPT in online marketing can enhance customer experiences by offering personalized and engaging interactions (Atlas, 2023; Huang & Rust, 2021; Mutoffar et al., 2023; Paul et al., 2023; Yoo & Diana Piscarac, 2023). They can also be employed to gather useful information, including user insights and preferences (Rivas & Zhao, 2023). Hence, GenAI facilitates mass customization and personalization according to customer preferences, meeting the demands of today's consumers. Additionally, it serves as a repository of knowledge, improving problem-solving abilities, and expediting the learning process for emerging technologies (Rane, 2023).

As a virtual assistant, these tools interact with customers through different channels like email, live chat, and messaging platforms (Mutoffar et al., 2023). Marketers can transform this valuable collected data into actionable strategies (Campbell et al., 2020; Sohail et al., 2023; Sterne, 2017). Nonetheless, there are some individuals who tend to rate GenAI assistance as poor across different tasks. But, even those people believe it can at least be helpful during the ideation phase (Talarico, 2023).

Creating engaging, unique, and high-volume content within budget limitations of organizations can be achieved with GenAI. This technology also aids in producing user-based content and automating processes (Fui-Hoon Nah et al., 2023; Mayahi & Vidrih, 2022). Finally, although GenAI tools cannot entirely substitute the skills and expertise of human teams, they can effectively perform various marketing tasks at a lower cost and higher speed than human teams or other tools (Kshetri et al., 2024).

2.4. Challenges and Concerns of GenAI in Marketing

While AI has been praised for its role in enhancing advertising and marketing efficiency, the advent of GenAI introduces serious concerns about potential risks. There is a need to shift our focus from advertising and marketing effects to the broader social implications of AI. Online AI-generated content ranges from benign to harmful, including false news and deepfake videos. (Huh et al., 2023). These contents might sometimes be more engaging than traditional ads and customers may mistake them for real content (van Esch & Stewart Black, 2021). Furthermore, AI-generated identities are emerging online, utilized by individuals with malicious intent. Examples include right-wing propagandists using fake profiles, and online harassers trolling their targets under friendly faces (Ferrara, 2024).

Despite the increasing role of AI in marketing and a rise in ethical studies, its effects on customer privacy, information security, discrimination, and diversity have been overlooked in existing literature (Mgiba, 2020). AI offers marketers extensive insights into consumer trends, yet it sometimes obscures fundamental understanding of consumer behavior. Marketers' growing reliance on AI can result in power imbalances and vulnerability to algorithmic shifts (Kozinets & Gretzel, 2021).

Although AI offers advantages in segmentation, targeting, and positioning, marketers must also acknowledge the risks of discriminatory practices. The unintentional and illegal price discrimination that can result from AI's audience targeting emphasizes the need for caution among businesses (Campbell et al., 2020). Using GenAI can decrease information accuracy and truthfulness, along with copyright concerns (Mondal et al., 2023; Stahl & Eke, 2024). Bias, misinformation, polarization, and privacy violation are other negative sides (Kowalczyk et al., 2023; Paul et al., 2023).

Distrust and concerns can be seen among individuals and organizations regarding the ethical aspects of AI systems and their handling of shared data (Sun & Medaglia, 2019). GenAI tools' characteristics can lead to difficulties in distinguishing interventions by ChatGPT from those conducted by humans (Stahl & Eke, 2024). Some researchers have tried to address this problem by including ChatGPT as a co-author in publications, yet this approach does not seem to gain approval within the academic community (Stokel-Walker, 2023). There are additional ethical concerns worthwhile to mention, including lack of transparency in the underlying model (van Dis et al., 2023), absence of autonomy and human control, lack of ethical content creation (Chimbga, 2023), isolation and substitution of human contact, environmental harm, and uncertainty of outcomes (Stahl & Eke, 2024).

Since the release of ChatGPT, a central macro-level debate has revolved around whether AI will replace human jobs. While past automation advancements and earlier AI iterations have indeed displaced many jobs, the advent of AI has also spawned new roles in advertising and marketing (Huh et al., 2023). Although AI is changing how creative professionals work, the advertising industry and its workers, especially those in creative roles, have not been significantly affected by it yet (Kulp, 2023). However, even if AI does not replace humans, there is a risk of work dynamics shifting. It is important to be mindful of how these changes affect power structures and whether they support fair working conditions (Sætra, 2023).

GenAI developers need to prioritize ethical considerations, focusing on user privacy and security to mitigate risks like personal data violation and social surveillance. Implementing responsible AI practices, including transparent data usage and content monitoring for harmful information, is crucial to prevent social manipulation and maintain ethical standards (Dwivedi et al., 2021; Krzysztof Wach et al., 2023).

2.5. Regulations and Governance

Ethical challenges and concerns exist not only within organizations but also at the broader societal level. Thus, it is vital to examine the regulatory frameworks addressing these matters. The unregulated use of GenAI systems poses numerous risks, including violation of copyright, intellectual property (IP), and moral rights, disrupting labor markets, and undermining customer rights. Additionally, it may lead to the mass production of illegal content, unfair competition, undermining originality, public disorder, public distrust in government, and the promotion of extremism and terrorism (Shumakova et al., 2023).

The current anti-discrimination and bias laws, alongside upcoming regulations targeting harmful AI applications, will aid in ensuring the ethical, transparent, and fair use of LLMs (Stokel-Walker & Van Noorden, 2023). An important ethical principle in AI usage is lucidity. This means AI tools should be easily comprehensible, detectable, and accountable (Tai, 2020). However, AI companies resist incorporating patterns into their outputs for better AI detection, fearing it may impact model performance, despite no evidence of risk. Companies postpone implementing watermarking, favoring profit over fulfilling their commitments. To tackle this issue, it is essential to enact laws similar to the Clean Internet Act, which would require advanced watermarking in AI outputs. This measure is aimed at safeguarding human culture, drawing parallels with past environmental protection measures (Hoel, 2024).

The EU and China are actively discussing regulations for GenAI. The EU emphasizes ethical AI use, focusing on data privacy, transparency, and accountability. Proposed regulations aim to classify AI systems by risk level and implement corresponding oversight measures. China focuses on utilizing GenAI potential while ensuring national security and social stability. This includes strict data control measures and guidelines to prevent AI misuse, particularly in surveillance and censorship (Ferrara, 2024).

There are currently two regulatory models for ChatGPT: a separate regulatory model, which categorizes ChatGPT as a distinct type of AI algorithm model, and a comprehensive supervision model, which issues broad AI governance rules to oversee key aspects of AI supervision. The EU and the United States vary in their approaches to regulating GenAI, mainly based on their definitions of ChatGPT's nature (Li et al., 2023).

The European Parliament recently adopted a comprehensive regulation on AI, aiming to protect fundamental rights and democracy while promoting innovation. The regulation bans certain AI applications, establishes obligations for high-risk systems, and mandates transparency requirements. It is expected to be formally adopted and enter into force within the next few years, with specific timelines outlined for implementation (Yakimova & Ojamo, 2024). The EU's AI Act categorizes AI risks into three levels and imposes stringent regulations on high-risk AI systems. Some scholars argue against classifying ChatGPT as high-risk, suggesting it should be regulated as a general risk instead. Others think the EU's regulatory framework is too strict and criticize it for potentially hindering innovation and market dynamism in the tech industry (Li et al., 2023).

There are more critical aspects regarding the EU's AI governance. Despite its foundation in democratic values and fundamental rights, it overlooks long-term risks to democracy and rights. The EU emphasizes ethical AI, but current regulations like the AI Act focus mainly on technical issues and lack mechanisms for accountability and redress for AI-caused harms.

One critical blind spot is the neglect of the media and communication sector in AI policy discussions. Despite AI's role in news, little attention is given to AI-driven misinformation's risks to democracy and social cohesion. European policies prioritize data transmission and access over content diversity and veracity, ignoring media's cultural, social, and democratic significance.

Furthermore, AI's role in surveillance capitalism and power imbalances is poorly understood. Current policies overlook corporate concentration and non-European influence in the media. The use of opaque algorithms for targeting individuals raises privacy and discrimination concerns, which are inadequately addressed (Pierson et al., 2023).

In contrast to the EU, the United States has comparatively limited legal regulatory documentation concerning AI. Their regulatory approach prioritizes a liberal principle, aiming not to hinder AI development and integrate it into existing regulatory systems. However, critics point out that this approach may not adequately address the need for involvement from regulators, government, and the public to ensure successful regulation (Li et al., 2023). Key developments in AI regulation in the US include the AI in Government Act of 2020, which mandates a plan for AI use in federal agencies, and the National Artificial

Intelligence Initiative Act of 2020, focusing on research and development strategy. Executive orders also prioritize AI R&D and trustworthy AI standards. Moreover, the FTC issued guidelines for AI decision-making transparency, fairness, and accuracy. Additionally, various states, like California, have proposed or enacted AI-related legislation, such as disclosure requirements for AI-generated content (Luckett, 2023).

Recently, the Connecticut Senate passed a groundbreaking bill aimed at regulating AI to combat bias and protect individuals from harm, including deepfake videos. Despite concerns about potential stifling of innovation and unintended consequences, the bill was approved after a debate. The bill now moved to the House of Representatives for further consideration (Haigh, 2024).

However, current regulations are unprepared for new AI models. The AI Act's direct regulation overlooks issues like content moderation under the Digital Services Act. AI regulation globally has mainly targeted traditional AI models rather than this emerging generation (Hacker et al., 2023). This is while GenAI systems like ChatGPT differ from traditional AI systems in two key aspects: dynamic context and scale of use. These systems lack specific contexts and are easily scalable, allowing a broad range of users with varying communication skills to interpret their outputs. Their extensive training data, spanning diverse content types, enables versatile applications across different domains (Helberger & Diakopoulos, 2023; Meskó & Topol, 2023).

Hacker et al. (2023) propose adopting a new distinct terminology to identify the different players in the large GenAI models (LGAIM) value chain, including developers, deployers, professional and non-professional users, and recipients of LGAIM output. This nuanced categorization is vital for accurately assigning regulatory responsibilities. The EU Council's broad approach failed to consider the intricacies of the LGAIM value chain, highlighting the need for regulations like the AI Act to cater to the unique characteristics of pre-trained models (Hacker et al., 2023).

Ferrari et al. (2023) discuss how oversight structures for GenAI systems can be based on their material properties, making them observable, inspectable, modifiable, and negotiable. They highlight the importance of using these properties as reference points for regulation, which can lead to precise analysis and intervention. They also challenge the notion of AI systems as

uncontrollable forces and suggest viewing them as objects that can be observed, understood, and regulated through democratic processes (Ferrari et al., 2023).

Some scholars believe the primary disruptive feature of AI lies in its capacity to replace and enhance human thinking functions (Huang & Rust, 2021). Nevertheless, some say the core issue with GenAI systems is their potential to deceive users into believing they understand and trust them more than they should. This can cause users to overestimate the systems' abilities and underestimate their flaws, leading to their problematic and potentially harmful utilization (Baum et al., 2023). In general, trustworthy AI is characterized by being lawful, ethical, and robust, both technically and socially. Achieving genuine trustworthiness involves evaluating all aspects of the AI lifecycle and considering diverse perspectives. Regulation is essential for fostering consensus and developing responsible AI systems crucial for society's well-being (Díaz-Rodríguez et al., 2023).

2.6. Trust in AI-Driven Marketing

Trust and loyalty are essential for fostering brand loyalty, making it crucial for managers to focus on factors that cultivate these qualities in customers (Cardoso et al., 2022). Trust is recognized as a driving force in consumer-marketer relationships, as it establishes expectations. The lack of trust is commonly cited as a primary factor causing customers to disengage (Agyei et al., 2020).

In order for us to trust AI, we need to have confidence in its reliability and its alignment with our interests. Therefore, transparency in how AI functions and arrives at its decisions is essential for us to determine its trustworthiness (von Eschenbach, 2021). Moreover, having familiarity with AI greatly enhances trust in its capabilities (Gillath et al., 2021). Some aspects like credibility, social presence, and informativeness may also have an impact on algorithmic trust (Kushwaha et al., 2021). It is worthwhile to mention that while trust focuses on believing in algorithmic attributes, credibility concerns the reputation of algorithms for being trustworthy (Shin, 2021).

Consumers tend to trust AI more when it gives them accurate and precise information. In marketing, if AI provides precise details about products, people are more likely to trust it and view the products positively. This trust in AI affects how consumers judge the information it

provides. However, the accuracy of the information AI gives and the actual quality of the products recommended also play a role in shaping consumers' opinions. So, essentially, when AI is accurate and specific and the products it suggests are good, people tend to trust it more (Kim et al., 2021).

Marketing professionals and customers may doubt an AI system if they do not understand its motives or reasoning. Their trust in the AI system can be split into two levels: trusting its predictions or actions and trusting its underlying model. Research on eXplainable AI (XAI) can show how different approaches affect trust in various application areas. For instance, studying XAI's impact on trust in ad targeting can reveal how explaining why certain ads are shown to consumers and the features behind the ad-targeting model can build trust. This research can also explore how consumer feedback on the clarity of explanations can enhance ad targeting and reduce the perception of ads as clickbait (Rai, 2020).

Another perspective in this area suggests that instead of just focusing on making AI systems trustworthy, the broader context in which they operate should be considered. This means understanding that AI exists within institutional or organizational frameworks that are responsible for safeguarding the interests of those they serve. Companies and institutions that develop and use AI should prioritize earning people’s trust by adhering to norms and standards. Trust not only creates obligations but also motivates parties to fulfill these obligations. Therefore, it is worth exploring how technology leaders and organizations can use trust, similar to how they use power, to rebuild people’s confidence in AI technologies (von Eschenbach, 2021).

Authenticity is another important factor in modern marketing. Weber (2019) delves into how businesses can connect with customers on a deeper level by aligning their brand's purpose with their marketing efforts. He offers insights and practical advice on how companies can build trust, loyalty, and engagement by staying true to their values and demonstrating authenticity in all aspects of their marketing (Weber, 2019). However, brands using AI for content creation are seen as less authentic, leading to negative consumer attitudes and behaviors. Consumers prefer human-created social media content over AI-generated content. But, if AI assists rather than replaces humans, reactions are less negative (Brüns & Meißner, 2024).

Furthermore, tacit knowledge is vital in marketing, driving a firm's competitiveness through its flow within and across marketing functions. Transferring this knowledge from humans to machines is crucial for innovation and relationship-building. Equally important is transferring machine-learned knowledge back to humans to identify biases, build trust in AI, and enhance decision-making. Conversely, experts with a deep understanding of AI may detect and correct machine errors when faced with uncommon situations (De Bruyn et al., 2020).

2.7. Theories

Integrating organizational development and technology in a system is challenging, with technology significantly impacting organizations (Appelbaum, 1997). Studying these influences involves combining information technology and organizational studies to gain diverse perspectives. This can help us better understand how technology influences our lives and society (Orlikowski & Barley, 2001).

Socio-Technical Systems (STS) and Technology-Task Fit (TTF) theories form the backbone of this research's theoretical framework. STS theory provides a holistic perspective on the interplay between social and technical components within organizational systems, aligning with the multifaceted nature of MarCom practices. It looks at the topic at an organizational level and examines the interplay between social and technical components within complex systems. Incorporating the TTF model complements the socio-technical perspective by evaluating how well GenAI fits the marketing tasks and goals, thus enhancing the understanding of its impact on performance. Reviewing literature about these topics can deepen our knowledge and improve their application in this study.

2.7.1. Socio-Technical Systems Theory

2.7.1.1. History and Definition

STS has its root in systems theory, which explores how different processes interact and affect each other over time, allowing the sustained existence of a larger whole. Systems theory was born in the 1940s through the efforts of biologist Ludwig von Bertalanffy, who aimed to revolutionize the study of life and living systems. Von Bertalanffy envisioned it as a solution to the growing complexity of global issues. The emergence of general system theory presented an alternative to the predominant reductionist approach, which was criticized for its

failure to address the whole, interdependent, and complex aspects of systems (Montuori, 2011).

Socio-technical theory originated later in the 1950s through the work of Trist and Bamforth at the Tavistock Institute. Their research aimed to enhance job satisfaction and productivity in coal mining. They discovered that advancements in mining technology influenced the social dynamics among miners, and these social aspects, in turn, influenced the effectiveness of the new technology. Socio-technical theory emerged partly as a reaction to prevailing technocratic and technologically deterministic models, which often overlooked the importance of human factors (Trist, 1981).

In traditional business models, there has been a belief that cutting-edge technology ensures high production and performance. However, reality demonstrates that this is not always the case. The social system needs to be fully addressed alongside technology to achieve success (Gorejena et al., 2016). STS theory sees organizational work systems as made up of social and technical subsystems that interact and affect each other. The technical subsystem includes business processes and the technologies used, which transform inputs into outputs to improve system performance. The social part includes people, their skills, attitudes, and the organizational structures they work within (Bostrom et al., 2009). In Appelbaum's definition, the organization's culture, norms, roles, and communication patterns, along with a network of social relationships and behavior patterns, collectively shape the social system (Appelbaum, 1997). Overall, both parts work together to achieve desired outcomes, and STS emphasizes the need to acknowledge and address the interdependence between them for successful results (Bostrom et al., 2009).

Using this viewpoint, it is also helpful to look at MarCom as a STS involving business, human practices, and technology. This is how the influence of GenAI can be analyzed deeply in MarCom practices of organizations, exploring its various impactful dimensions. As stated by Baxter & Sommerville, (2011), the outcome of using this method involves gaining insight into how human behavior, social interactions, and organizational aspects influence work processes and the utilization of technical systems.

When socio-technical design emerged after World War II, its founders envisioned it as a way to enhance human intelligence and skills, integrating them with new technologies to

transform our lives and work. This vision materialized in the 1970s when numerous industries attempted to adopt socio-technical working methods. In that time, businesses showed interest in socio-technical design for several reasons. Many were implementing new computer systems, with limited understanding, and were eager for their staff to embrace and utilize them efficiently. They also realized that the integration of new technology would necessitate restructuring of work processes. However, these initiatives gradually declined, leaving many people today still engaged in routine, tightly controlled jobs with limited prospects for personal growth (Mumford, 2006).

STS models have been extensively used in European management practices and research for organizational enhancement. In contrast, many information systems studies in North America tend to focus on fewer STS constructs, often addressing either technical or social subsystems separately (Dennis & Valacich, 2001). This difference in focus may stem from cultural distinctions, with the US prioritizing technology-related aspects and Europe placing greater emphasis on social considerations. While addressing one subsystem might explain or predict results in specific contexts, the accumulated STS literature suggests that considering both technical and social aspects together leads to better outcomes such as effective change, smoother worker transitions, and improved productivity. However, dealing with the complexities inherent in this approach poses challenges for researchers and practitioners (Alter, 2002, 2003; Bostrom et al., 2009; Mumford, 2003; Trist et al., 1993).

Although many managers recognize the significance of socio-technical issues, they seldom utilize socio-technical design methods. This limited adoption might be due to the challenges in applying these methods and that they do not match well with technical engineering problems or how people interact with technical systems. The reason for adopting socio-technical approaches to system design is to avoid the risk of systems failing to fulfill the organization's goals. While systems may meet technical requirements, they can still be considered failures if they do not adequately support the organization's actual work. This occurs because techno-centric design approaches overlook the complex relationships between the organization, its people, and the supporting system (Baxter & Sommerville, 2011).

Two core values of STS theory are humanizing work and fostering workplace democracy. Socio-technical design aims for the joint optimization of social and technical systems, ensuring human needs are considered alongside technical advancements (Mumford, 2006).

Joint optimization occurs when these two parts of the system yield positive outcomes (Appelbaum, 1997). Organizational objectives are achieved most effectively not by solely optimizing technology and adjusting the social system to fit it. Instead, it is about optimizing both the technical and social aspects together, leveraging people's adaptability and innovation to reach goals, rather than strictly dictating how these goals should be achieved through technology (Cherns, 1976). This is because an organization consists of different parts that rely on each other and work together in a complicated way to create a performance. Modifying one part of the system without thinking about how it affects the others will create systems that hinder effectiveness (Sony & Naik, 2020). The collaboration of social and technical factors determines the success or failure of a system performance (Walker et al., 2008).

The second core value lies in the fact that democratic communication and decision-making are essential to give employees a voice in technology and work organization changes. Employees using the new systems should participate in deciding the necessary improvements to working conditions (Mumford, 2006).

In their early work, Emery and Trist found that creating semi-autonomous work groups in organizations can boost productivity and worker satisfaction. They showed that enhancing the technical system alone does not always lead to higher productivity if the social system is not supportive. Using work groups as the foundation for work design helps organizations adapt to environmental demands and the interaction of social and technical elements. One widely used application of STS theory is the formation of self-regulating work groups (Appelbaum, 1997; Cummings, 1978; F. Emery & Trist, 1960).

2.7.1.2. Theory Evolution

Since its inception at the London Tavistock Institute, socio-technical theory has evolved and been tested. STS theory has transitioned from a focus on optimizing technical efficiency to understanding organizations as intricate STS. This shift acknowledges that organizational success depends on blending technical and social aspects, highlighting the need to think about human and social factors alongside technology (Miner, 2015).

One early concept the researchers in this field explored was 'open systems,' recognizing that every STS operates within an environment that influences its behavior. This environment

includes both internal factors, like departmental interactions within a company, and external factors beyond the firm's boundaries (Mumford, 2006). The concept of open systems, initially aligned with the theory of 'homeostasis,' suggested that systems evolve and eventually reach a stable state where they can adapt to change smoothly (Davies, 1972). However, contemporary perspectives challenge the notion of inevitable stability, suggesting that systems can become increasingly chaotic as they transition between states (Mumford, 2006).

Another development in STS was proposed by Emery & Bucklow (1978) and Pasmore (1995). They suggested that every member of a work group in organizations should have the right balance of variety, chances to learn, decision-making abilities, organizational support like training and supervision, a job valued by others, and prospects for advancement.

2.7.1.3. AI within STS

Technology, digitalization, and AI are intertwined with social interactions and can lead to class conflicts if both technical and social aspects are not valued equally (Avis, 2018). The computational functioning of AI tools embodies the interactions among people, processes, and the environment, thus defining them as STS. But, they can be considered as a part of a larger STS too (McCradden et al., 2023), as seen in this study. AI may function as a system in certain scenarios and as an environment in others. It may serve as a product at times and as the context at others.

AI should be developed to align with the components of the system, aiding rather than slowing down the workflow (Salwei & Carayon, 2022). Considering socio-technical factors should be an ongoing part of AI (or any work system) design, involving human factors experts from the start to ensure collaborative design and seamless integration into the intended system (Appelbaum, 1997; Gorejena et al., 2016; Trist, 1981). This approach entails thoroughly understanding the needs and work environment of users to identify the real problems that AI can solve. It is important to acknowledge that just because AI can solve a problem does not mean it is the right solution. A collaborative human-centered design process is crucial to ensure that AI is used effectively to address the correct issues within the socio-technical context (Salwei & Carayon, 2022).

Implementing a collaborative design process for AI development that considers both the overall STS and the workflow over time is crucial. However, it is expected that unforeseen

issues will arise during technology implementation. This unpredictability is a fundamental aspect of STS (Wilson, 2014). Recognizing that unexpected problems will arise, we must establish a system to detect and learn from these challenges and adjust the technology as needed. A continuous design process allows for the identification and resolution of issues that arise from using the technology within the STS. Transparency and trust in AI systems are also vital components of this process. Further research is needed to understand how users can effectively utilize AI-generated information for decision-making, including how their trust in the system may change over time (Salwei & Carayon, 2022).

2.7.1.4. Marketing as STS

The marketing section of enterprises can be seen as a STS, integrating social and technical components to drive effective communication strategies. Current literature lacks studies examining marketing from this perspective. Within this point of view, the technical subsystem consists of the tools and technologies used for marketing tasks, such as GenAI, while the social subsystem includes human practices, organizational structures, culture, and communication patterns.

In marketing, the success of communication strategies depends on the seamless integration of social and technical elements. For example, the effectiveness of an email marketing campaign relies not only on the technical capabilities of the email automation software but also on the quality of the content and the relevance to the target audience. Similarly in STS, social and technical factors are interdependent and influence each other's performance. By acknowledging this interdependence, marketing strategies can be developed in a way that leverage both human expertise and technological innovation to achieve optimal results.

The ultimate goal of MarCom in companies is to drive organizational performance by achieving specific business objectives, such as increasing sales or brand awareness. Socio-technical systems offer a holistic framework for understanding how social and technical factors contribute to organizational performance.

Marketing is a dynamic field that requires constant adaptation to changing consumer preferences, market trends, and technological advancements. STS also emphasize adaptability and innovation, recognizing that organizations must evolve to remain competitive in a rapidly changing environment. By adopting a socio-technical perspective, companies can foster a

culture of innovation within their marketing teams, encouraging employees to experiment with new technologies and strategies while also considering the social implications of their actions.

2.7.1.5. Theory Limitations

For about six decades, STS thinking has mostly been used in areas like new technology and work design. While it has been effective, some scholars suggest being more daring and allowing the approach to grow further. This means expanding how we see systems, using it to tackle more diverse complex problems and global issues, and focusing more on predicting outcomes (Davis et al., 2014).

The second limitation lies in the fact that socio-technical literature has largely overlooked the importance of pay incentives. Changes in output and product quality could be better explained by considering shifts in pay incentives more concisely. There has been a suggestion and some disagreement about whether to include a third dimension—the economic system. This is based on the idea that a production system must meet financial, social, and technical requirements to effectively achieve its goals (Kelly, 1978). However, it is important to acknowledge that this critique may not hold significant weight. Traditional analysis of work systems predominantly emphasized economic factors and their impacts. The advent of STS theory marked a paradigm shift, moving beyond mere economic considerations to look at other dimensions.

Third, according to Dillon (2000), this theory's implementation might not be ideal for technology-driven companies and could potentially lead to breakdowns in communication. He points out that these companies often require a structured approach to problem-solving, which the STS lacks. While the system promotes freedom of choice and responsibility, this can also be a weakness. This particularly happens in situations where organizations cannot afford to rely solely on employee discretion due to the severity of potential consequences and the need to mitigate risks (Dillon, 2000). Nevertheless, an alternative perspective may suggest that technology-driven companies, precisely because of their heavy reliance on technology, stand to benefit even more from socio-technical considerations.

Finally, it is shown that the adoption of STS in developing countries has been sporadic and limited in scope. The effectiveness of implementing STS relies on the ability of various

developing countries to adapt and implement interventions tailored to their specific and shared needs and conditions (Kiggundu, 1986). Research and practice in Information and Communication Technology for Development (ICT4D) can offer valuable actions in this regard. ICT4D is dedicated to utilizing ICTs for international development purposes, with a primary focus on developing countries (Walsham, 2017).

2.7.2. Task-Technology Fit Theory

2.7.2.1. Definition

Studies on socio-technical concerns have utilized a diverse range of research approaches and techniques. Goodhue and Thompson's task-technology fit theory provides a detailed examination of the relationship between work-related factors and technology usage, aiming to achieve a well-balanced integration of task-related factors and IT support. The theory states that the extent to which tasks and technology fit will influence both work performance and technology utilization (Goodhue & Thompson, 1995). In this research, this theory will help to gain an understanding of the implications and utilizations of GenAI and its potential effects on performance. It can also be helpful in operationalization of STS theory.

TTF has a connection to media richness theory and its extensions due to their shared concern. Introduced in 1986 by Richard Daft and Robert Lengel, media richness theory defines a communication medium's ability to convey transmitted information (Daft & Lengel, 1986). According to an extension of media richness theory, tasks executed using overly rich or lean communication channels are less effective than those using the “best fit” channel. Consequently, the "task-media fit hypothesis" was proposed to map four task types with corresponding communication channels to improve performance (Mcgrath & Hollingshead, 1993). Together with TTF, they highlight the significance of aligning technology and communication mediums with task characteristics to enhance productivity and information exchange.

Previous research on TTF examined various technologies and performance measures. Initially, TTF was applied to group support systems, where it was found to positively influence group performance. Later studies expanded TTF's application to other areas, such as mobile information systems, AI, data analytics, and decision support systems. These studies aimed to understand how the fit between tasks and technology impacts individual and

group performance, intention to use technology, and user satisfaction (D'Ambra et al., 2013; Sturm & Peters, 2020).

In a positive scenario, if a technology aligns closely with the specific attributes of work tasks, it is more likely to enhance job performance. The TTF viewpoint applies to both compulsory and voluntary usage situations. It perceives technology as a tool used by individuals with specific objectives to accomplish tasks. When technology precisely meets the requirements of a task and users possess the necessary knowledge and experience, performance improves. Incongruence between task demands and technology characteristics can slow decision-making processes and increase errors. Additionally, specific training tailored to the technology used can enhance performance by improving familiarity and skillfulness, potentially impacting both speed and accuracy (Goodhue et al., 2000).

If TTF has an impact on performance and users incorporate TTF into their evaluations, these assessments should anticipate performance outcomes. Goodhue and Thompson's research has revealed a statistical correlation between user evaluations of TTF and perceived performance (Goodhue et al., 2000).

Users are assumed to be aware of the costs and benefits of technology, even in mandatory use cases. They are sensitive to differences in information systems' characteristics, such as hardware operation difficulty and data access, and how these affect task processes. Users also consider outcome implications like accuracy, completeness, and time required. This sensitivity leads to their ability to evaluate the fit between technology and task requirements (Goodhue et al., 2000).

Researchers have noted limitations in studying either utilization or fit individually. Solely considering the utilization overlooks the involuntary nature of some usage, where technology is employed due to necessity. In such cases, the impact on performance depends more on how well the technology fits the task, rather than just utilization. The solution is a combination of these elements. Technology-to-Performance Chain (TPC) model combines both of them and asserts that for an information technology to positively affect individual performance, it needs to be used and well-suited to the tasks it supports (Goodhue & Thompson, 1995). As a result, performance impacts are determined by both TTF and utilization (Angolano et al.,

2012). TPC model consists of key components, as defined by Goodhue and Thompson (1995):

1. **Technologies:** Tools utilized by individuals to execute tasks, including hardware, software, data, security control tools, and IT support systems.
2. **Tasks:** Actions performed by individuals to transform inputs into outputs.
3. **Individuals:** The capability of using technologies to aid in task performance, influenced by factors like training, skill levels, IT experience, motivation, social norms, and cultural beliefs.
4. **TTF:** The extent to which technology assists individuals in performing tasks, reflecting the fit between task requirements, individual abilities, and technology functionality. It involves interactions among tasks, technology, and individuals, where specific tasks necessitate distinct technological functionalities from various organizational units.
5. **Utilization:** The behavior of employing technology to complete tasks, including frequency of use or diversity of applications used. It is influenced by beliefs about consequences of use, affect toward use, and social norms, shaping the decision to use or not use a specific system, based on theories about attitudes and behavior.
6. **Impact of TTF on Utilization:** The relationship between TTF and beliefs about system usage consequences, determining whether systems are perceived as more useful, less useful, or providing relative advantage.
7. **Performance Impact:** The accomplishment of tasks by individuals, characterized by enhanced efficiency, effectiveness, and/or quality for higher performance.

It is difficult to measure the performance impacts of information technology directly. User evaluation is a method used for this means and is an assessment by users that can measure TTF. Both systems characteristics and task characteristics play a role in this evaluation and it is better to include both TTF and utilization aspects (Goodhue & Thompson, 1995). This study will use qualitative interviews for user evaluation.

2.7.2.2. TTF in Marketing

TTF offers a valuable lens for examining MarCom practices and the impact of technology, such as GenAI, on individual performance. However, this perspective has not yet been explored in the current literature. In the realm of marketing, it revolves around the alignment between the technology used and the tasks undertaken within a marketing strategy. At its

core, TTF urges marketers to carefully evaluate how well a chosen technology fits with the objectives they aim to achieve.

Moreover, TTF sheds light on how well technology supports the unique characteristics of MarCom. MarCom often involves dynamic interactions with diverse audiences across multiple channels. TTF helps in understanding how technology aids in managing this complexity, ensuring consistent and engaging communication across platforms.

TTF also addresses the iterative nature of MarCom campaigns. As strategies evolve based on feedback and insights, TTF assesses how adaptable the technology is to these changes. This adaptability is crucial in maintaining relevance and effectiveness in an ever-evolving marketing landscape.

Additionally, TTF can illuminate the role of technology in enhancing the creativity and innovation inherent in MarCom. Whether it is through interactive content creation tools or advanced analytics platforms, technology can empower marketers to experiment with novel approaches and measure their impact effectively.

In summary, TTF serves as a valuable model for studying MarCom by examining the fit between technology and the diverse tasks and characteristics inherent in the discipline. It offers insights into how technology can be leveraged to optimize communication strategies, engage audiences effectively, and drive business success in an increasingly digital world.

2.7.2.3. Theory Limitations

There are limitations in TTF that need to be acknowledged. First, even though factors affecting IT adoption have largely been studied in the literature, existing frameworks (such as TTF) are failing to include one important aspect, the interaction between users and tasks (Ammenwerth et al., 2006).

Furthermore, teams often evolve in how they perform tasks as time progresses. Nevertheless, the predictive power of TTF is low due to its inability to account for changes over time. Researchers suggest that initially, better fit predicts performance; teams with fitting technology perform better than those with poor-fitting technology. However, within a short time, this initial fit no longer predicts performance; teams with fitting technology maintain

consistent performance, while those with poor-fitting technology improve through innovation and adaptation. Two main conclusions arise from this viewpoint. First, technology fit can predict team performance shortly after adoption, but initial assessments are temporary as teams adapt. Hence, current theoretical models may not remain useful after initial use. Second, teams should learn to adapt existing technology and work structures more effectively (Fuller & Dennis, 2009).

Last, TTF models have faced criticism for not paying enough attention to individual situational and psychological factors, including the importance of top management, trust among team members and leaders, and the responsibility of team members (Agarwal et al., 2000).

2.8. Summary

AI is typically seen as a neutral tool, focusing on efficiency and accuracy, yet it disregards the social and individual challenges it may create. The ethical concerns are further intensified by AI's exponential growth and widespread reach (Gonçalves et al., 2023). GenAI's role in fostering a positive society depends on its adherence to core values and the implementation of regulations to mitigate potential harms throughout its lifecycle (Sætra, 2023).

While STS and TTF offer valuable insights for deeply studying marketing dynamics in the context of technology usage, this intersection has not been thoroughly explored in the current literature. The following section will identify the frameworks used by each theory and present a conceptual framework for this research.

3. Theoretical Framework

3.1. STS Framework

A framework frequently employed for examining STS changes is suggested by Leavitt (1962) and has been used by many researchers. Leavitt's original framework (Figure 1) consisted of four interconnected aspects: people, tasks, structure, and technology. This later evolved into a six-dimensional hexagonal structure (Figure 2), including people, infrastructure, technology, culture, processes, and goals. The collaboration between social and technical systems leads to a joint optimization across different parts of the organization, rather than focusing solely on

technical or social aspects. Therefore, when designing the socio-technical structure, factors seen in this framework should be taken into account (Sony & Naik, 2020).

In this study, the dimension of 'people' represents the human element, particularly the marketing professionals interacting with GenAI. 'Technology' provides a lens through which to examine the technical aspects of GenAI and its role in transforming MarCom. This includes the capabilities and limitations of this technology, as well as the technological infrastructure required for its integration within the organizations. 'Goals' dimension plays an important role too. Companies have specific objectives and targets concerning their marketing strategies. Understanding how GenAI aligns with or modifies these goals is instrumental in evaluating its impact. Furthermore, the 'culture' aspect of organizations dictates the norms, values, and practices within a company. By examining this dimension, the ethical considerations in using GenAI for MarCom will be investigated. Additionally, ‘processes/procedures’ refer to the established methods and routines that guide how work is performed within an organization. These include workflow designs, standard operating procedures, communication protocols, coordination mechanisms, decision-making processes, and feedback loops. Lastly, 'infrastructure' refers to the foundational physical and organizational structures needed for the operation of a system. This includes the facilities, equipment, and support systems that enable and sustain the work processes. This framework acts as an inspiration for creating a conceptual framework for this study, which will be presented later.

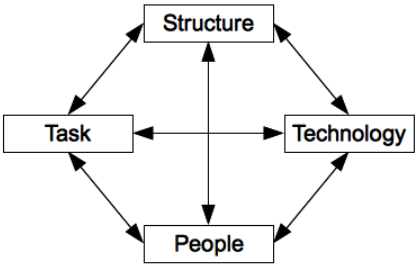

Figure 1. Original STS framework by Leavitt (1962).

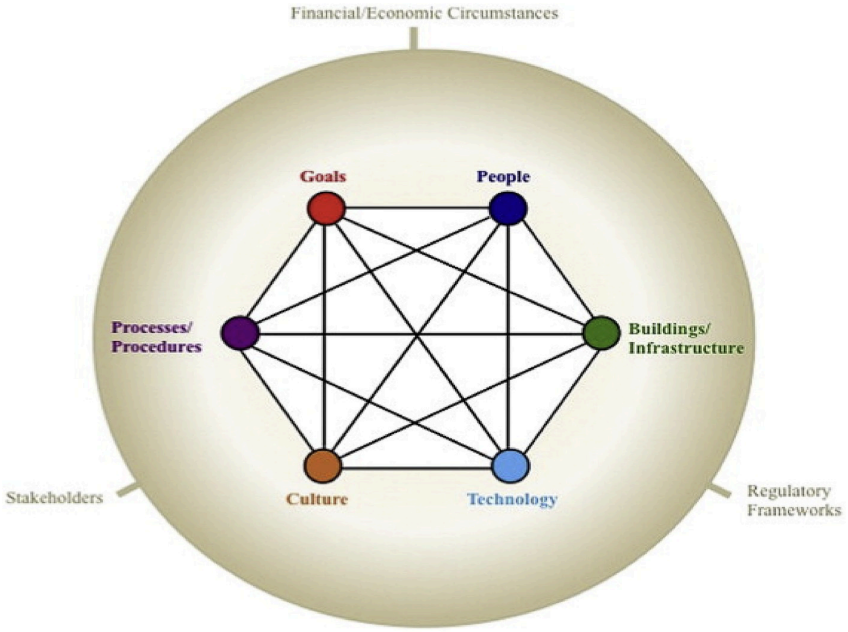

Figure 2. STS framework adapted by Davis et al. (2014).

3.2. TTF Framework

As discussed in the literature review, TPC integrates insights from studies on user attitudes as predictors of utilization and incorporates the concept of TTF as a predictor of performance. Illustrated in Figure 3, the model suggests that TTF depends on task, technology, and individual characteristics. TTF directly affects performance and indirectly influences utilization through factors like expected consequences, attitude, social norms, habit, and facilitating conditions. Utilization, in turn, directly impacts performance. Essentially, the model argues that for a technology to positively influence individual performance, it must align with the tasks it is designed to support and must be utilized (Goodhue & Thompson, 1995; McGill & Klobas, 2009).

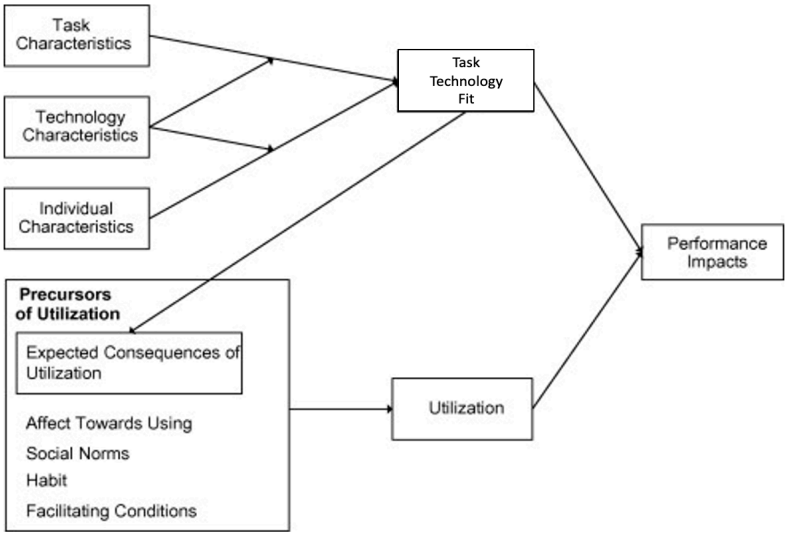

Figure 3. The technology-to-performance chain (Goodhue & Thompson, 1995).

3.3. Conceptual Framework

To study the discussed dimensions carefully and deeply, there is a need for operationalization. It would also be helpful to establish a connection between different elements of this research. Hence, an adapted conceptual framework from STS and TTF will be presented in this section.

Figure 4 shows how technology (e.g., GenAI), people, and tasks are interrelated within different organizational systems (e.g., marketing department), guided by TTF and STS principles. Moreover, it highlights ethics, governance, and regulation as integral elements of the external environment impacting organizational practices. These pillars are deeply rooted in values that shape their principles. At their core, these values provide a moral compass for individuals, organizations, and societies, guiding decision-making and behavior. Values exist inside organizations too, which shape the overall organizational culture.

Furthermore, the illustration depicts the connection of STS and TTF, starting from a macro-level societal perspective (STS) and progressively zooming into organizational dynamics impacted by TTF principles. The overlapping organization and environment circles demonstrate their integration and mutual impact. This figure showcases how the organization operates within its broader environment, involving societal and regulatory elements. It also highlights the reciprocal influence between the organization and the environment, as shown by double arrows. In this study, organizations primarily impact the environment and society through their marketing efforts.

Inspired by the TTF model, a Venn diagram within the organization depicts how three interrelated components interact and affect performance and technology utilization. It also underscores the coexistence of human practices and technology within an STS context, emphasizing their collaborative role in task completion.

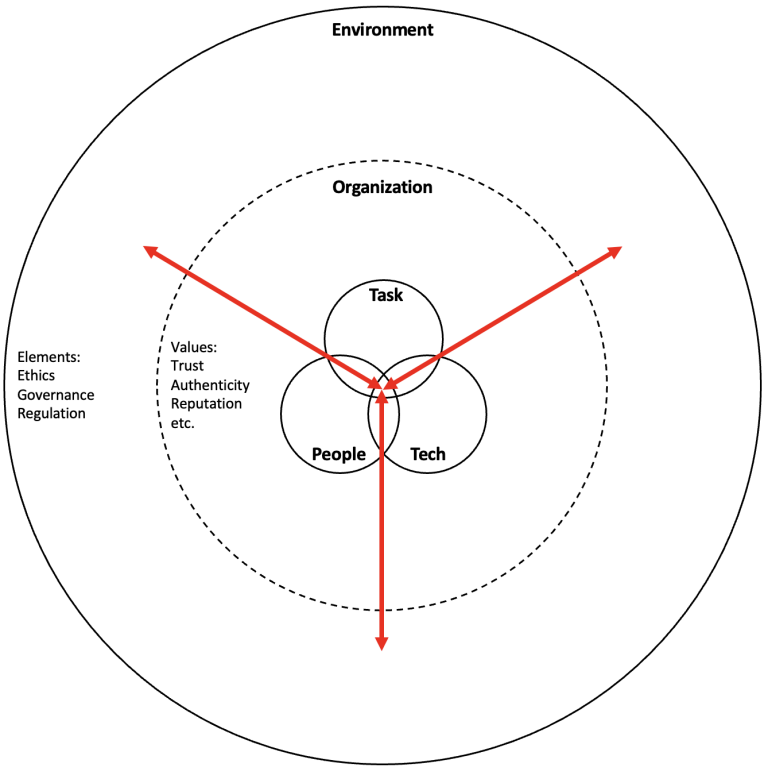

Figure 4. Influences on use of GenAI in MarCom in the tech industry.

Lastly, studying the effects of GenAI on performance requires a measurement tool. User evaluation is proposed by TTF researchers as a tool for this purpose (Goodhue & Thompson, 1995). In this research, user evaluation is conducted through interviews to find the answers to the research questions. The insights gained from STS, TTF, and this adapted conceptual frameworks inspired the researcher to formulate interview questions. Also during the data analysis phase, they serve as the foundation for connecting and correlating the research findings.

4. Methodology

This research employs a qualitative methodology due to its ability to offer a thorough and in-depth understanding of the impact of GenAI on MarCom. Qualitative methods provide

detailed descriptions of phenomena, enhancing understanding of events and their context. They broaden perspective, particularly in the early stages of research, aiding in meaningful explanations that deepen research understanding (Sofaer, 1999). Qualitative research is valuable to both researchers and practitioners as it focuses on real-world practices in their natural settings, illustrating how organizations operate in everyday situations (Silverman, 1998).

Given that the research questions cover various dimensions, including usage, ethical considerations, and performance effects, the flexibility of the qualitative method is well-suited to explore the nature of this transformative phenomenon. This approach also aligns effectively with the exploratory form of this research.

4.1. Relationship to the Setting

In this study, the researcher's positionality plays an important role in shaping the study. As a researcher with a Bachelor's degree in computer science and four years of experience in digital marketing, my dual background influences how I perceive and investigate the integration of GenAI in marketing. My technical knowledge equips me to understand the technical aspects of GenAI technologies. Simultaneously, my marketing experience provides insights into the practical implications and challenges of implementing new technologies within corporate settings. I am familiar with the dynamics of MarCom, content creation processes, and the strategic objectives companies aim to achieve through innovative tools like GenAI. This experience enables me to identify gaps in current practices and understand the terms and language interviewees and literature use in this area.

Furthermore, I have worked in the global marketing division of an international company, focusing on commercial tools and processes. This experience has provided valuable insights into the operational dynamics of large enterprises and the integration of advanced technologies in marketing workflows. Also, my training path and courses in the field further enriched this knowledge base. Despite potential concerns about bias introduced by this background, it significantly helps to have a thorough point of view and enriches the study with practical industry insights.

4.2. Data Collection and Sampling

The first phase of data collection was a systematic literature review, exploring different academic journals, papers, books, blog posts, and news articles to dive into the key elements of this research. A thorough review of theoretical background was also carried out to enhance the understanding and application of them. This phase concluded with 125 reviewed papers and articles to develop a robust foundation.

The next phase was conducting nine in-depth semi-structured interviews to capture rich insights and perspectives on the topic. Later, two more interviews were conducted for data validation, bringing the total number of interviews to eleven. The development of interview questions was based on the theoretical framework and findings from the literature review. Formulated questions were organized into five main categories:

1. **Introduction:** background, current role, and level of familiarity with GenAI.
2. **Internal factors:** usage, decision-making, organizational structures, learning processes, performance impacts, benefits, and challenges.
3. **External factors:** competitors and how they are using GenAI in their marketing efforts.
4. **Ethical considerations:** professional and legal standards, organizational values, ethical concerns, and how they are addressed.
5. **Conclusion:** Expectations for GenAI's role in marketing over the next five years.

Within each category, questions were labeled to indicate their relevance to specific research questions or theoretical frameworks. Additionally, key questions were identified for prioritization in case of time constraints.

The interviews were conducted in English and consisted of open-ended questions to encourage participants to share their experiences and insights related to the use of GenAI in MarCom tasks. They typically lasted between 30 to 60 minutes and were held via either Zoom or Microsoft Teams. Each participant received an English interview guide beforehand, serving as a discussion framework (For interview guide, see Appendix A). This strategy ensured focused conversations while maintaining flexibility for participant input.

Initially, the sampling technique was non-probability purposive, enabling the researcher to actively select participants based on their organization, role, and familiarity with the subject. To achieve this, a list of large IT and software development companies in the US with more than 10,000 employees was created. Then, LinkedIn was used to identify employees in high-level MarCom roles at these companies. Efforts were made to mostly select the roles involving content generation, as there was a high chance that these people may have already started using GenAI for their tasks. More than 400 people who could be potential interviewees were contacted through LinkedIn messages. Subsequently, a snowball technique was implemented to achieve a representative sample of employees with diverse backgrounds across various large IT services companies. To do so, each interviewee was asked to introduce other colleagues who might be a good fit for this research.

Ultimately, nine interviews were carried out for the data collection part and two for validating the findings. These professionals were working at large IT enterprises in the US, who had high-level marketing roles, including product marketing manager, global startup marketing program manager, global integrated marketing content strategist, senior marketing manager, content marketing manager, global marketing lead, senior social media manager, and global director. They were employed at Amazon Web Services, Microsoft, NetApp, Snowflake, Intuit, and VMware. Choosing IT as the primary sector was influenced by the fact that professionals in this industry are likely to have direct experience with AI technologies. Big tech companies are leaders and major investors in GenAI tools. They have been at the forefront of developing and integrating AI solutions into various aspects of their businesses, including MarCom.

Focusing on companies in the US is justified due to the country's significant role in the development and adoption of new technologies. The US is home to many leading tech companies pioneering advancements in AI technology. This choice is also because the researcher was on a research stay at UCLA when conducting the research. Being in the same country as the interviewees simplified scheduling and facilitated easier coordination for interviews.

Selected interviewees constitute a representative sample for this study due to their diverse roles, extensive experience, and positions within big tech companies. First, the participants come from a range of roles that encompass different facets of MarCom, including content

creation, strategy development, integrated marketing, and social media management. Second, represented companies are early adopters and key players in the implementation of technologies, making them ideal subjects for studying the integration of GenAI in marketing. Additionally, the seniority of the interviewees ensures that they possess significant experience and a mature understanding of decision-making processes, organizational structures, strategic goals, established rules, and guidelines.

4.3. Data Analysis

Thematic analysis was employed on the interview transcripts to recognize recurring patterns and themes. This type of analysis involves identifying, coding, and interpreting patterns (themes) within the data (Braun & Clarke, 2006). It demands greater engagement and interpretation by the researcher and goes beyond counting explicit words, focusing on identifying both implicit and explicit ideas within the data, known as themes (Guest et al., 2011). Coding involves indexing or categorizing the text to create a structure of thematic concepts within it (Gibbs, 2007).

After cleaning the interview transcripts, all references to names, including people, tools, and companies, were removed to maintain anonymity. This step was essential because some companies have their own version of GenAI tools, and leaving these references in the data could potentially disclose the interviewees' affiliations. During the data analysis, specific themes were identified from the literature review and interviews. A qualitative data analysis tool, called Taguette, was used to code cleaned transcripts. The analysis followed an iterative approach, with continual refinement of codes and themes through repeated reviews of the interview data. Finally, seven themes emerged, each associated with multiple sub-themes and codes (For table of themes and codes, see Appendix B). The themes are: “GenAI Usage,” “Benefits and Beneficial Aspects of GenAI in Marketing,” “Risks and Challenging Aspects of GenAI in Marketing,” “Ethics, Governance, and Regulation,” “Future of GenAI,” “Socio-Technical Systems,” and “Task-Technology Fit.”

4.4. Ethical Consideration

Throughout the whole research process, ethical considerations for research were strictly followed. Prior and during each interview, explicit consent was obtained for recording. Additionally, participants were provided with a confidentiality disclaimer before the

interview, assuring them that their responses would be kept strictly confidential and used solely for research purposes. They were informed that all data and records generated would be stored and discarded securely after the study's completion. Participants were also assured that neither they nor their organization would be identified in any publications produced by the study without their express permission. During the process, participants had the liberty to pose questions, express concerns, avoid answering, or withdraw their involvement at any stage.

5. Findings

The findings from the analyzed data will be discussed here, guided by the conceptual framework. First, in "Working with AI," all aspects of GenAI in the MarCom of large IT companies will be explored, laying the foundation for answering RQ1.1. This section will examine the benefits and risks associated with GenAI and delve into the emerging theme of redefining creativity. Referencing the conceptual framework, this part focuses primarily on the interaction of task, technology, and people as depicted in the Venn diagram. It also serves as a preliminary step in understanding how GenAI impacts performance, addressing RQ1.3.

The second section of the findings centers on ethics. It investigates internal ethical concepts within organizations, including organizational values and the nature of trust in using GenAI for marketing. Additionally, it examines broader environmental factors such as governance and regulations, forming the basis for answering RQ1.2. This section highlights how organizational and societal values influence the ethical deployment of GenAI.

In the third section, future implications of GenAI will be discussed. Building on the current state of GenAI usage in "Working with AI," this part will explore perceptions of the future of this technology, marketing, and jobs, providing a deeper understanding of the anticipated evolution and its impact.

In the subsequent analysis, findings will be examined through the lenses of STS and TTF theories. This will prepare for the discussion section, where all research questions will be addressed in depth, integrating insights from both theoretical perspectives.

5.1. Working with AI

Working with AI shapes the first part of this study's analysis. To provide a better understanding, a hypothetical workday in the marketing department of a large IT enterprise will be described first, specifically highlighting MarCom tasks based on data collected from interviewees:

The day begins with the marketing team gathering for a brainstorming session to develop ideas for an upcoming campaign. On the previous day, each person made a list of content themes and title suggestions with the help of the company's GenAI tool to bring to the meeting. The tool provided several creative directions, helping the team overcome the blank page issue. They refined and edited the suitable ideas before discussing them in the meeting. Then, a few promising ideas were selected to develop further. The final themes will be used to create campaign content for different channels. During the meeting, GenAI was used to create meeting notes and action items.

After the brainstorming session, the content strategist dives into writing a new blog post about the latest industry trends. They input a detailed prompt into the GenAI tool, which generates a draft. They spend the next hour editing the content, ensuring it aligns with the brand's voice and messaging. The post will be handed to a copywriter for writing a catchy title. The copywriter will use GenAI to create 20 potential engaging titles and then chooses the best one to edit and make it better.

Meanwhile, the social media manager uses the tool for sentiment analysis, scanning recent social media interactions to gauge public opinion on their latest product launch. AI quickly summarizes the sentiment, identifying key insights and trends that they can use to adjust their strategy. At the same time, a social media marketing specialist uses GenAI to create some social media posts. They input parameters for different platforms and audiences, allowing AI to generate tailored content for each channel.

In the afternoon, the integrated marketing manager employs GenAI to generate visualization mockups for the product launch campaign. AI assists in creating innovative image concepts and designs, which will be then fine-tuned to meet the brand's standards. These visualizations

will be used on the first version of the campaign's landing page before being finalized. This way, the initial draft can be shown to the marketing manager to receive feedback quickly.

Simultaneously, the content marketing manager utilizes GenAI for research on competitors' recent content shared on different channels. The tool processes the data, extracting relevant information and providing a summary. This information will be used to gain an understanding of the situation and inspirations for future content ideas. This helps the team see the competitive landscape and refine their marketing strategies.

As the day progresses, GenAI's automation capabilities free up time for the team to focus on more innovative tasks and professional development. One team member needs to generate a report on the performance and engagement of a series of eBooks. With the help of GenAI, this task is completed quickly, allowing them to spend the last hour of the workday attending an online workshop to improve a critical job-related skill.

5.1.1. GenAI Usage

This section will be focused on GenAI usage in detail based on interviewee responses. Collected information indicates that in marketing, GenAI is predominantly used for micro-scale tasks. The primary use case is content creation, including a diverse array of tasks such as writing emails, blog posts, eBooks, website content, technical articles, examples, titles, and social media posts. Additionally, it helps in derivative content creation, creative work, image generation, and developing visualization mockups. It is also employed for content management tasks, including editing, summarizing, creating outlines, clarification, and simplification. In general, this technology seems to be helpful for refinements and dealing with complexities.

Another significant use of GenAI in marketing is information management. This includes processing large volumes of data, conducting research, searching through local files and emails, and validating information. While some users currently rely on GenAI as their primary tool for research, others find it less helpful due to the occasional provision of incorrect, irrelevant, or inaccurate answers.

“A lot of my usage is research too, because I am a big researcher. You have to be in marketing and writing. And I use that a lot. I use [Tool Name] a lot for research, more than I use Google. Nowadays, I hardly even get on Google at all. I use Google only when I am looking for images.” - Interviewee #1

“I have tried to use our chatbot for research to understand our products and our competitor products from a technical level. One thing that people have started to realize with all the chatbots is their tendency to make things up. In technical work, it could be really bad when it creates an inaccurate answer and then imagines it to be true. From that perspective, it is less helpful in research. Because sometimes it is making up answers to questions that I need a technical answer that has to be very accurate.” - Interviewee #8

The next use case for GenAI tools is brainstorming and idea generation. They are effective for overcoming writer's block by providing initial ideas and helping to frame content, making it easier to start from a blank page. In content marketing, these tools are particularly useful for brainstorming catchy titles, outlining research-based content, and generating initial drafts that can be refined later. However, their tendency to produce inaccurate or fabricated information, especially in technical contexts, means they cannot be fully trusted for detailed research or precise writing tasks.

“One [use case] is idea generation and brainstorming. I think it works really well to get you started. Instead of starting from a blank page, you can instantly get a lot of ideas.” - Interviewee #5

“The biggest thing that GenAI, our chatbot, has helped with is the blank page lock that writers like myself get into. I am partly a writer, because I have to write collateral blogs, papers, things like that. And the hardest thing for writing is starting from the blank page. A good prompt with a good amount of details will help me start to create an asset and frame it so that it is, depending on the subject matter, as much as 80% of the way done by the time the output comes from [Tool Name]. So, that is the biggest thing I have used it for.” - Interviewee #8

GenAI tools are also used for operational support, such as generating meeting notes and handling routine tasks. They help automate processes and act like an assistant to employees.

"The great thing about AI is that it allows you to scale and automate a lot." - Interviewee #7

"It takes away those annoying things no one likes to do. Maybe some folks like to do those stuff, but it gives you more time back in your day to do other really great things. So what I really love is just seeing that consolidation of time back for the team to go and be innovative in other spots." - Interviewee #7

Lastly, marketing employees use GenAI for sentiment analysis and social media monitoring. This way, they can automate the extraction of actionable insights from vast volumes of data. This not only saves substantial time but also enhances the accuracy of trend analysis, essential in resource-constrained marketing environments. Beyond sentiment, GenAI's capability to recognize logos and visual elements enables brands to engage with relevant content they might otherwise miss, amplifying their social media presence and responsiveness. This application fosters a more dynamic and informed approach to social media strategy.

"[My usage is] all about social sentiment. We use a tool [...] that has AI built into it and will tell me things. For example, I can do a search query. So, I search on social media and say, 'What are people saying about the weather in Seattle today?' And then, usually you get a whole bunch of overwhelming responses. [...] With the AI, it will actually pull out key insights saying, '67% of people have negative sentiment about the weather today. Do you want to drill down into it?' and then I am able to drill down into key topics, which has saved me so much time from something that would take multiple hours into seconds." - Interviewee #7

One theme that emerged from interviewees' responses was GenAI adoption. While some people believed that we need to embrace this technology, some were hesitant. Furthermore, some interviewees implicitly referred to their adoption stage within Rogers' (1962) diffusion of innovation model. The majority of them identified themselves as early adopters.

"When you work for a company like [Company Name] and this is their main focus, then you just embrace it and learn it as well." - Interviewee #4

"There is so much hesitation for the adoption and a lot of companies, especially smaller companies, just start using it at a basic level. [...] I personally have a model of embracing change, personally and professionally. And that is the thing I am gonna keep, whether it is in marketing or technology. Just embrace the change because you never know what will happen. [...] So, do more, save time, and have more fun. And I think that is all possible with AI. It is just being able to embrace that change and see what happens." - Interviewee #7

"We as professional marketers, most of the people that I work with have 5-10 years of experience, are self-starting and finding the tools for themselves. I would imagine most people like me have to investigate these tools on their own." - Interviewee #8

"I am familiar [with GenAI]. I have not spent an enormous amount of time with it, but I used it a little bit. [...] There just has not been a real strong need for it." - Interviewee #6

5.1.2. Benefits and Beneficial Aspects of GenAI in Marketing

Interviewees highlighted different benefits of GenAI in MarCom, which can be grouped into three categories: product-level, personal-level, and organizational-level benefits.

5.1.2.1. Product-Level Benefits

First, interviewees shared various insights on the product-level benefits of using these tools, emphasizing increased quality and enhancement. Using this technology allows for the rapid development of initial drafts, which can then be refined and improved collaboratively. However, the reliance on AI for quality enhancement still requires a critical human touch to ensure the final product meets high standards.

"I do think that there are efficiency gains and quality improvements [with GenAI]. [...] For me, especially being in the slightly more creative content role, I do really think that so many of my tasks are well positioned to be improved and more efficient by using [Tool Name] and AI." - Interviewee #2

5.1.2.2. Personal-Level Benefits

The second group of benefits are at the personal level. Many people found that GenAI increases their pace, helps them complete tasks faster, and saves time. This allows them to

engage in more creative, innovative, and interesting work after getting the day-to-day operational tasks done, or spend more time with their families.

"What used to take 20 minutes now needs 2 minutes." - Interviewee #7

"It definitely helps my life and my job. I do not have much time. Anything that helps out with getting my job done faster, sooner, and allows me to spend more time with my family [would be appreciated]." - Interviewee #4

"It takes away those annoying things no one likes to do. Maybe some folks like to do those stuff, but it gives you more time back in your day to do other really great things. So what I really love is just seeing that consolidation of time back for the team to go and be innovative in other spots." - Interviewee #7

Additional benefits in this category include increased productivity, efficiency, and empowerment. The first two were mentioned by all interviewees and are closely related to the previous benefits, especially increased pace. GenAI helps users accomplish tasks faster by automating routine processes and enabling natural language queries, reducing the time and effort required for complex tasks. This allows employees to handle more work and produce higher volumes of content in shorter time frames.

In one of the interviews, conversational interface was mentioned as an important beneficial aspect of GenAI that makes things easier for people. It enables natural, conversational queries, which reduces the cognitive load and makes the process more intuitive and efficient. This user-friendly approach enhances productivity by minimizing the effort required to find answers.

"Searching is so much easier and I can just talk and ask questions as I would ask someone in our team, even though that is just a few seconds. But I think mentally, it helps. It is making the process a lot easier. When I ask questions, I do not have to ask in a perfect grammar, I could just ask casually. I think that helps." - Interviewee #9

Lastly, GenAI is changing the way some tasks are done and affecting jobs. For example, it is turning good writers into editors.

"I think GenAI turned good writers into editors. I could say that I am a very good editor right now. So, it has changed my job in a way." - Interviewee #1

5.1.2.3. Organizational-Level Benefits

Organizational-level benefits mark the third group of categories in this section. At this level, focus is mostly on economical benefits, such as cutting costs, making more money, and getting more work done. In a way, employing such tools can propel companies within the framework of capitalism, fostering growth and competitiveness. By automating manual processes, companies can reduce the number of people required for routine tasks, allowing employees to focus on more strategic activities. This shift not only leads to cost savings but also enables the same workforce to produce more output. While these benefits enhance organizational efficiency, they also raise concerns about job security for employees. As a result, the transition to AI-driven efficiency gains requires careful management to balance job displacement concerns and maximize the potential of human-AI collaboration.

"I think it is like when you think about America and capitalism. Yes, efficiency gain is one side of the coin, but the other side is doing more." - Interviewee #2

"There are all sorts of opportunities for companies to implement GenAI tools for best practices, sales, and cutting costs. [...] At the end of the day, if this is going to help companies make money and use less resources, then a lot of companies will jump on it, for sure." - Interviewee #4

5.1.3. Risks and Challenging Aspects of GenAI in Marketing

After addressing the benefits of using GenAI in MarCom, it is time to explore the associated risks and challenges. Similar to the benefits, these can be categorized into three groups of product-level, personal-level, and organizational-level risks. Understanding and addressing these potential pitfalls is vital for implementing GenAI effectively and responsibly.

5.1.3.1. Product-Level Risks

First of all, product-level risks and challenges will be discussed. Hallucination and receiving incorrect, irrelevant, or lengthy answers fall into this category. Some interviewees saw these as the main challenges they have when utilizing GenAI, but there were some people who did

not observe them. The quotes from interviewee #8 on pages 42 and 60 are a witness to the problem.

"I think the challenges are when you need it to do something, but it provides a result that is not what you are looking for at all." - Interviewee #4

"I know there is a lot of talk about it being inaccurate or hallucinating, but I do not know if I have seen that that much, especially lately." - Interviewee #5

Although increased quality was one of the benefits mentioned by some interviewees, others reported drop in quality when using these tools. Interviewee #9 believed this problem is diluting the overall purpose of content.

"I would say overreliance and overusing these tools to create content [is the main challenge]. It defeats the whole purpose of the content industry itself. There are some press companies generating a bunch of content through AI, and they are creating a ton of content just to get more clicks on their website and to derive more visitors. It is diluting what the whole purpose of content is and really bringing down the content quality on the web space. So, abusing it just to create and focusing more on quantity over quality, is hurting the industry itself." - Interviewee #9

Using GenAI may also result in responses that use unrealistic language, have a generic or incorrect tone, are overly formal, or contain uncommon words.

"AI will do whatever the heck it wants to do. It will make it super long and use words that I do not find that most people actually speak in their day-to-day [conversations]. [...] Sometimes I get edits back and I am just like, what is this? no one would ever talk like this or this does not make any sense." - Interviewee #3

"I think the challenge is just the generic tone of the responses. I think the downside and the challenge is it is pretty bland and you can tell it is written by a computer. It has no personality. It does not follow a good narrative sometimes." - Interviewee #5

Additionally, users sometimes faced the challenge of verifying the accuracy of AI-generated content. Due to this problem, there is a need to approach AI-generated answers with caution and double-check their accuracy through additional research. This verification process is necessary to ensure the reliability of information provided by AI tools.

Furthermore, there are limitations in the functionality and capabilities of current GenAI tools. Technical issues such as compatibility with file formats can hinder their usage. For instance, difficulties arise when AI struggles to read or process specific file formats like PDFs.

The age of data used to train AI models presents another challenge. AI models may be based on data that becomes outdated quickly in dynamic industries. This can affect the relevance and accuracy of AI-generated insights, particularly in contexts requiring up-to-date information such as new product introductions or market trends.

"The age of the data [is a challenge]. GenAI Tools are only as recent as they are training. You can do repeated fine tuning to improve the model, but it takes a long time and a lot of GPU cycles to do that." - Interviewee #8

5.1.3.2. Personal-Level Risks

The second group of risks address personal-level issues. First and foremost risk here is the job security and changes GenAI is bringing to jobs. This concern will be further discussed in "Anticipating the Future."

"I have been in the marketing writing space for many years. I am later in my career. If I was starting out and had just a few years of experience, I would be very concerned about it. There are a lot of basic writing tasks that there would not be any need to hire somebody on, so it is gonna be very disruptive in that respect. I think that is already happening." - Interviewee #6

Another problem is overreliance on GenAI tools and its potential impact on the quality and integrity of content within the industry. The quote from interviewee #9 on page 47 illustrates this issue.

5.1.3.3. Organizational-Level Risks

The final category of challenges pertains to organizational-level risks, including concerns such as reputational and branding risks, as well as company data confidentiality. Incorrect or inappropriate AI-generated content can misrepresent a company's messaging and voice, leading to brand damage. There is also a risk of data breaches if confidential information is mishandled, which can damage trust and reputation. This concern will be further discussed in "Navigating Ethics." Interviewee #8's quote on page 55 is also a witness to this risk.

"I think there are trade-offs when you are using it for corporate, because it is training that model. So other people can get the stuff that you are working on, and that is the big concern I have. So, I would say that is a challenge in terms of making sure it is set properly. And sometimes, if you are working on confidential stuff, that is a problem." - Interviewee #1

5.1.4. Redefining Creativity

As discussed earlier, the use of GenAI can both enhance and diminish creativity. Another important observation is the redefinition of creativity in the workplace. With the advent of GenAI, the nature of creativity is undergoing a profound transformation. Traditionally, creativity in writing required individuals to craft content from scratch, drawing upon their imagination and expertise. However, with GenAI tools, the focus has shifted towards developing creative prompts that generate optimal responses from AI, fundamentally redefining the creative process. This change may necessitate new training to help individuals adapt to it.

Interviewee #1 highlighted this shift by discussing the importance of prompt development in their workflow. They emphasized the iterative nature of crafting prompts, continually refining and retrofitting them to suit specific tasks. This approach suggests a move away from traditional content creation towards a more dynamic interaction with AI, where the quality of the output heavily depends on the creativity and precision of the prompts provided.

"I customize the tools to what I am doing and get very involved in prompt development. I iterate a lot, adjusting everything based on the feedback I receive, tailoring it specifically to the task at hand." - Interviewee #1

Interviewee #3 reinforced this by noting their proficiency in creating effective prompts and recognizing that the depth and quality of these prompts significantly influence AI's output. This shift requires new skills and changes the nature of creativity, making it more about guiding and shaping AI responses.

"I think I am really good at creating prompts to get the task to where I want it to go. I also think I am giving it more than other people would. [...] So that again comes down to giving it really good prompts and also having it get to know your writing style." - Interviewee #3

Similarly, interviewee #8 underscored the importance of improving one's ability to drive AI through better prompts and subsequent edits.

"Down the road, these tools will still only be as good as the prompts and the inputs. So, my role will be to improve my ability to drive it and my ability to come back and edit it." - Interviewee #8

While prompt engineering is a creative task, it confines creativity within the boundaries of what GenAI can interpret and generate. The creativity of AI-generated outputs is inherently limited by its capabilities and the quality of training data. AI models can only generate responses based on the patterns and information they have been trained on. If AI has not been exposed to certain styles, genres, or innovative concepts, it cannot produce them. This dependency confines creativity to what AI knows rather than exploring truly novel ideas.

Moreover, human creativity is deeply rooted in personal experiences, emotions, and cultural contexts. While AI can mimic these aspects to some extent, it cannot actually understand or replicate the depth of human experience. This limitation means that AI-generated content may lack the emotional resonance and cultural authenticity that come from genuine human creativity.

To harness the full potential of AI while maintaining the richness of human creativity, finding a balance is needed. This involves recognizing the strengths and limitations of AI, encouraging diverse and original human input, and continuously pushing the boundaries of what AI can achieve without losing the essence of human creativity.

5.2. Navigating Ethics

Interviews revealed that people generally lack a deep understanding of the meaning of ethics and ethical concerns associated with using GenAI. In the IT industry, marketing professionals often view ethics in a very broad sense. This broad interpretation sometimes leads to the mistaken assumption that ethics are synonymous with organizational values, compliance, and branding guidelines. While these elements are important, they do not encompass the full scope of ethical considerations.

While ethics can be complex and challenging to define precisely, it is crucial for marketing professionals in large tech companies to have a solid grasp of these issues. Given their role in communicating with society and acting as intermediaries between their companies and the public, they have a significant responsibility to understand and address ethical concerns.

Marketing professionals are increasingly using GenAI in their work, and this technology brings with it a host of ethical considerations, such as data privacy, misinformation, and the potential for bias. Their unique position means they can influence public perception and trust. Therefore, developing a more thorough understanding of the ethical dimensions of GenAI is not only beneficial but essential for ensuring responsible and transparent communication with the public. In the following, this topic will be explored more and different perspectives will be discussed.

5.2.1. Organizational Values

In the interviews, participants were asked to discuss the organizational values of their workplace that they try to convey in their marketing efforts. Their answers revolved around the following values:

1. **Empowerment:** Some participants highlighted that their organization focuses on empowering individuals, whether it is students, employees, or customers, to achieve their best selves and harness their creativity and productivity.
2. **Human-centric AI:** Another value was recognizing humans as the primary decision-makers, with AI acting as an assistant to enhance human capabilities without replacing them.

3. **Security and Ethics:** Ensuring security, compliance, and ethical AI usage was emphasized, especially regarding the development and deployment of AI products and tools.
4. **Continuous Learning:** The value of fostering a learning culture, where employees are encouraged to continuously develop their skills and knowledge, was also noted as a critical organizational value.
5. **Customer-centricity:** Participants mentioned the importance of delivering value to customers by providing high-quality products and services, maintaining trust, and focusing on customer success and satisfaction.

These values are rooted in the broader societal values and cultural traditions. They reflect the principles and ethics that society upholds, which shape and influence the way the organizations operate. By aligning organizational values with those of the community, companies foster a sense of shared purpose and commitment, ensuring that their actions resonate with and support the cultural and social norms that are important to their employees, customers, and partners. Having reviewed these values, the next crucial topic to address is trust, which will be explored in the following section.

5.2.2. Dual Nature of Trust in GenAI Tools

Trust in AI is an important ethical consideration, as highlighted by contrasting viewpoints in the interviews. Some individuals expressed a cautious approach, emphasizing their lack of complete trust in GenAI. This skepticism underscores concerns about the reliability of AI and the necessity to cross-verify information independently.

"I do not trust it 100% and sometimes I will do additional research to verify that it is giving me the correct answer and I use it as one of my sources, not my only source. [...] I definitely do not trust it 100% and if I need to get ideas and titles, for example, I would make sure to feed questions very specifically. I just use it to get me started. I do not use whatever answer it gives me or apply it right away." - Interviewee #9

Conversely, others exhibited a high level of trust in GenAI tools, even relying on them for guidance or validation purposes.

"It is really nice to be able to do some of that validation to make sure that we are either not missing something or that it is truly accurate. So, I will ask for GenAI's opinion on those types of things for accuracy." - Interviewee #2

This paradox highlights the complex nature of trust in technology, particularly in GenAI. The varying degrees of trust people place in AI reflect their experiences, knowledge, and the perceived reliability of these systems. Interviewee #9 represented a cautious approach, viewing GenAI as a supplementary tool that requires verification with other sources. This perspective shows a critical awareness of AI's limitations, such as potential biases, errors, and the lack of human intuition and contextual understanding. This cautious stance is vital in preventing the propagation of misinformation and ensuring that decisions based on AI recommendations are well-founded.

In contrast, Interviewee #2's reliance on GenAI for validation purposes indicates a higher level of trust in the technology's accuracy. This trust may stem from positive past experiences or a belief in the robustness of AI algorithms. However, this approach can be risky. AI systems, while advanced, are not infallible. They can perpetuate existing biases in the data they were trained on, misunderstand sensitive contexts, or generate plausible-sounding but incorrect information. Thus, using GenAI as a primary validation tool without cross-referencing with other sources can lead to false assurances and potential errors in judgment.

The dual nature of trust in GenAI tools raises important ethical considerations. How can a tool be both distrusted and trusted to the extent of being used for validation? This dichotomy shows the necessity of improving AI literacy, helping users understand both the capabilities and limitations of these systems. Users should be encouraged to adopt a balanced approach, combining the innovative potential of GenAI with critical thinking and traditional validation methods.

Moreover, developers and stakeholders in AI must strive for transparency in how these systems operate, the data they use, and their inherent limitations. Providing clear guidelines on best practices for using GenAI can help mitigate the risks associated with over-reliance on these tools. Regular audits and updates to the AI models can also ensure they remain as accurate and unbiased as possible.

In conclusion, the issue of trust in GenAI reflects broader ethical concerns in the adoption of emerging technologies. Balancing trust and skepticism, enhancing AI literacy, and ensuring transparency and accountability in AI development are necessary steps in navigating this landscape responsibly.

5.2.3. Ethical Considerations

Ethical concerns when using GenAI in MarCom will be discussed here. First and foremost, most marketing professionals overlooked the societal and public aspects of ethics. Their primary focus often lied on protecting their brand and ensuring company data confidentiality, rather than prioritizing users' data privacy and considering their broader influence on the public. This emphasis on internal concerns can overshadow the ethical responsibility they have towards their audience and society at large. In this section, a range of ethical concerns that were mentioned in the interviews will be explored. But before that, there were also some people who did not see any ethical issues and concerns in using GenAI for their work.

"I have not come across anything [regarding ethical issues]. I would say I have been very impressed with things that GenAI will tell you when it is not sure about something. It will tell you when it is not able to formulate an opinion. [...] It knows that there are sensitive things out there, like geopolitical things, that it has no business answering and it will not. It has that built in." - Interviewee #2

"I do not really see any sort of ethical challenges. But I could see it being an issue in different industries for sure." - Interviewee #4

"For our purposes, I do not see that there are going to be ethical problems. I know that there is a broader consideration about the ethics of AI." - Interviewee #6

"We have not encountered any [ethical issues] yet; Not that I am aware of. Because I am not part of the AI committee or the privacy team. I am sure there are going to be plenty. [...] I have not seen it yet, which is good. But it might happen higher up than where I am at." - Interviewee #7

5.2.3.1. Data Privacy and Confidentiality

A primary ethical concern revolves around data privacy and the confidentiality of sensitive information. Interviewees highlighted the dilemma of whether to use real company and client names when feeding data into AI models. This practice can risk exposing confidential information and proprietary data, which could lead to breaches of privacy and trust. The interviewees recognized the need to anonymize or code any identifying information to mitigate these risks, reflecting a broader industry concern about safeguarding sensitive data while utilizing AI tools. Moreover, using tools that are approved by companies can help in this case. Another concern here was to be careful not to train AI models with incorrect data.

"In terms of ethical considerations, it is just basically not sharing things that you know are confidential. If something is marked confidential, if something is marked internal, that is internal. That does not mean that it goes out. That does not go into any chat program. I cannot put statistics in chat. I cannot do anything with it. I have to keep it out. I think following those types of rules is important." - Interviewee #1

"Probably the biggest way [to consider ethics] is using the company approved tool. My understanding is most larger companies that allow you to use a GenAI engine of any kind, have some sort of requirement of using a sequestered one, a walled garden version. [...] I am required to only use these tools if I use GenAI, because it is a walled garden. It protects the information that we used to train the tools with. That is always a big concern with them, that your information gets released, especially the proprietary information." - Interviewee #8

Interviewee #8 also expressed concern about the potential misuse of people's proprietary information when using GenAI, particularly as the focus shifts from written to visual work. They emphasized the importance of properly attributing quotes, creative works, images, and videos, underscoring a rigorous approval process for using visual media externally. When creating content themselves, they follow a meticulous process for sourcing and attributing images and quotes, especially for high-visibility documents. This process includes legal approval to ensure compliance and proper attribution.

The interviewee then pointed out another significant risk when using GenAI: the possibility of generating or using unattributed quotes and information without their knowledge. This shows the need for caution and thorough vetting to avoid legal and ethical issues.

5.2.3.2. Transparency and Authenticity

Transparency in the use of AI tools is essential to maintain trust and authenticity in MarCom. Interviewee #5 emphasized the ethical necessity of disclosing when AI tools are used to create content. Customers and stakeholders need to know whether they are engaging with AI-generated or human-created content to make informed decisions. This aligns with the broader ethical principle of honesty in marketing practices, ensuring that companies do not mislead their audience about the origins of their content.

"From a marketer's perspective, if you are using AI tools to create an opinion that is not yours, I think that is a little unethical. I think you need to identify when you use AI and when you do not. Frankly, I think customers will know when it is not your voice, your brand voice, your personal voice. [...] There are a lot of bad things you can do with AI outside of a corporate or enterprise environment, but I think everyone just has to be pretty honest on how they use it when they use it and what was developed by it and what was developed by their personal voice." - Interviewee #5

However, when interviewees were asked if they use a disclaimer for their content when they use GenAI, they said they do not. They explained that the content is mainly their work and that GenAI just improves it, rather than writing the entire piece.

Another threat to transparency and authenticity is deepfakes. GenAI tools can convincingly alter videos or audio to fabricate events or statements, undermining trust and spreading misinformation. Interviewee #3 expressed their concern in this regard, as seen on page 57.

5.2.3.3. IP and Attribution

IP rights present another significant ethical challenge. Interviewee #4 pointed out that in industries like music and art, the ability of GenAI to create new works based on prompts raises questions about ownership and originality. Interviewee #7 also stressed the importance of proper attribution for any creative work generated by AI. The potential misuse of proprietary information without proper attribution or consent can lead to legal disputes and

ethical breaches, particularly as AI-generated content becomes more prevalent and sophisticated.

Plagiarism also falls under this category. GenAI tools can inadvertently lead to plagiarism by producing text that closely mirrors existing content without proper attribution. As interviewee #3 mentioned, they prefer to write in their own words first and then use GenAI tools for editing, rather than generating text directly. This approach helps avoid unintentionally copying someone else's work.

"I have not personally [encountered any ethical issues], but obviously there are a lot of concerns about deepfakes and plagiarism. That is why I make sure that I am writing my own words and then having GenAI tools edit it, rather than asking [Tool Name] to give me words; because I do not want to accidentally steal from someone." - Interviewee #3

5.2.3.4. Bias and Fairness

The risk of embedding and perpetuating biases in AI-generated content is another critical concern. Interviewee #8 noted the potential for racial and inclusion biases. Ensuring that AI models are trained on diverse and representative data sets is crucial to mitigate these biases. However, the inherent complexity of AI systems means that biases can be subtle and difficult to detect, necessitating ongoing vigilance and corrective measures.

5.2.3.5. Quality and Overreliance

The quality of content generated by AI and the risk of overreliance on these tools are also significant issues. Interviewee #9 pointed out that the overuse of AI to mass-produce content can dilute quality and undermine the integrity of the content industry (See their quote on page 47). They warned against prioritizing quantity over quality, which can lead to a proliferation of subpar content and damage the overall credibility of MarCom.

5.2.3.6. Job Displacement and Workforce Impact

The potential for AI to displace human jobs and alter workforce dynamics is another ethical consideration. Interviewees acknowledged the tension between automating tasks and preserving human roles within the organization. While AI can enhance efficiency and productivity, it also raises concerns about job security and the ethical implications of

replacing human labor with automated systems. This topic will be investigated more in "Anticipating the Future."

5.2.3.7. Professional and Legal Guidelines

Adhering to professional and legal guidelines is paramount in the ethical use of GenAI. Interviewees discussed the importance of ensuring that AI tools are used appropriately and that their use is vetted through established legal and ethical frameworks. This includes not only compliance with data protection laws but also adhering to industry-specific regulations and standards. Interviewees highlighted the role of internal review processes, such as AI committees or responsible AI teams, in overseeing and guiding the ethical use of AI within organizations. This topic will be discussed more in the next section.

5.2.4. Understanding Governance and Regulation

Interviews revealed that major tech companies have internal legal departments and professional guidelines for ensuring safe and ethical AI usage. Many also maintain AI councils dedicated to exploring, testing, and adopting the best AI tools, creating a secure environment to protect critical data.

Internal legal departments play a pivotal role in overseeing content creation and ensuring adherence to legal standards. These departments are responsible for vetting marketing materials, whether they are blog posts, case studies, or eBooks, to avoid legal liabilities and maintain the company's reputation. For instance, certain words and phrases are prohibited to prevent misleading claims. Furthermore, branding consistency is maintained through following editorial and style guidelines. Companies develop comprehensive guides that dictate the style and language used in marketing content.

The process of content creation involves multiple layers of review. In most companies, content undergoes editorial scrutiny to align with brand voice and legal standards. This process includes training AI tools to understand and generate content that fits the company's established brand voice.

Despite these processes and guidelines, there appears to be a gap in awareness among employees: most marketing employees were not fully informed about the specifics of the AI regulatory guidelines. This discrepancy raises important questions. If the people using AI

tools daily are not fully informed about the rules and ethical standards governing these tools, the integrity of the "walled garden" could be compromised. This lack of awareness might lead to inadvertent breaches of ethical standards and misuse of AI tools. It is crucial to consider how these guidelines can be effectively followed if employees are not adequately informed about them. The question arises: Are these guidelines and councils merely symbolic, serving more as public relations efforts than effective governance measures?

Moreover, while interviewees demonstrated a strong understanding of branding guidelines, their knowledge did not seem to extend to AI regulatory guidelines. When asked about ethical considerations, many referred to branding rules instead. This indicates an opportunity for improved communication and training to ensure that AI ethics are as well understood as branding principles. Without proper education and training, the guidelines lose their efficacy. This situation is akin to having a well-constructed fence but leaving the gate wide open.

To fully protect and maximize the benefits of GenAI tools, it is essential for all employees, especially those in marketing, to be well-informed about AI guidelines. This involves not just creating rules but actively educating and engaging staff to understand and implement them effectively. By enhancing awareness and understanding of these guidelines, companies can ensure the secure and ethical use of AI tools, aligning with their broader commitment to responsible AI practices.

5.3. Anticipating the Future

5.3.1. Future of GenAI Tools

The future of GenAI is filled with both promise and uncertainty. Insights from various industry professionals revealed a blend of excitement, skepticism, and caution.

Interviewee #6 highlighted that many organizations are currently exploring different GenAI tools from numerous vendors. This exploration phase means companies must spend time figuring out which tools best suit their needs. However, they predicted that within the next 5-10 years, the market will narrow down to a few key players. This will make it easier for companies to choose the right tool for specific functions, with clear guidance from industry analysts.

The practical limitations of current GenAI technology are another point, as stated by interviewee #8. Despite initial low expectations, they were pleasantly surprised by the usefulness of the generated content, particularly in structured formats like outlines. However, they acknowledged shortcomings of GenAI, such as the lack of dynamism and creativity in storytelling and the pervasive issue of hallucinations, where the AI generates inaccurate or nonsensical information. These limitations highlight that while GenAI has been impressive in many cases, it is far from perfect. The trajectory of its development will depend heavily on overcoming these challenges, particularly in enhancing the accuracy and reliability of the outputs.

"When I initially thought about using GenAI tools, I had no illusions that they were going to be perfect. [...] I did not expect it to be as good as it was. But I feel like GenAI systems do not have dynamism in terms of the way they create assets. They are not good storytellers. Their anecdotes are very good. They are not based on anything. So, it is the limit that the tool can only go so far. [...] What it will do in 3-5 years is anybody's guess, but I think it is going to be really impressive. I think there is a lot more of that creativity coming from it, if they can solve the hallucinations that it tends to have. The hallucination is a big problem." - Interviewee #8

Last but not least, the ambiguity surrounding the future of GenAI was seen in the reflections of interviewees. The potential for GenAI to evolve and improve is substantial, yet the path forward is anything but clear. Interviewee #4's remarks showed a dual sentiment of excitement and apprehension, drawing parallels between the advent of social media and the current state of GenAI. Just as social media brought about unforeseen negative consequences like anxiety and cyberbullying, GenAI may similarly cause unanticipated repercussions. The potential for GenAI to disrupt industries, particularly entertainment, raises questions about its broader societal impact. Will it democratize content creation to the extent that traditional roles and industries are rendered obsolete? This uncertainty highlights the need for consideration of the ethical and societal implications of GenAI.

"I really do not know what the future of GenAI is going to be, but I do know that I could see it potentially getting quite messy. [...] It is exciting and scary at the same time, to be completely honest. I think it is an industry, a technology, that is new to all of us." - Interviewee #4

In summary, the future of GenAI is both exciting and unpredictable. As the technology advances and major players emerge, it will be essential to address the ethical, practical, and societal challenges that come with it.

5.3.2. Future of Marketing

Future of marketing with the help of GenAI is poised to transform various aspects of the field, as reflected in the insights from industry professionals. Their anticipations fall into several key categories: process automation, content creation, customer insights, and sales efficiency.

5.3.2.1. Process Automation

Interviewees were optimistic about the potential for GenAI to streamline and automate many manual marketing processes. They envisioned a future where marketers can input a content idea and automatically generate all necessary briefs for different teams, reducing the need for separate tickets and manual coordination. This automated workflow is expected to free up marketers to focus on more strategic tasks and improve efficiency significantly.

"I think it will definitely help a lot with automating manual processes and identifying the right target audience. I think it will make the workflow more efficient." - Interviewee #9

5.3.2.2. Content Creation

Interviewees believed that content creation will undergo the most significant change with the integration of GenAI. They noted that AI-generated images and content can cut down on studio time and editing, thus reducing costs and improving content quality. This innovation is expected to open new creative avenues for brands. However, interviewee #2 expressed concern that AI-generated writing might lack creativity. They hoped for future improvements in AI creativity, but remained cautious about the technology's current limitations.

According to interviewee #8, content creation will still require human oversight for some time, especially in B2B marketing, where accuracy and relevance are critical. They stressed the importance of maintaining human involvement to ensure content quality and relevance.

5.3.2.3. Customer Insights

GenAI is foreseen to play a crucial role in generating customer insights quickly and accurately. Interviewee #7 anticipated that marketing teams will grow to trust AI models more, particularly in data and sentiment analysis. This trust will likely lead to more widespread use of AI for crafting targeted and effective marketing strategies. Nevertheless, this optimism is tempered by concerns about the quality and reliability of these insights. While GenAI can quickly process large datasets, there is a risk that it might misinterpret data. Moreover, over-reliance on AI could lead to superficial understanding and misinformed strategies if the outputs are not critically evaluated. This raises questions about the readiness of teams to trust AI completely and the potential for AI to introduce biases into the data analysis process.

Another anticipation is highlighted by interviewee #8, who stated that GenAI can enhance the customer learning process by providing tailored information earlier in the customer journey. This could significantly shorten sales cycles, making the customer journey more efficient and informed. This can happen only if the data fed into AI is accurate and comprehensive. Any flaws in the data could lead to misguided marketing strategies.

5.3.2.4. Sales Efficiency

Salespeople are envisioned to use GenAI for enhancing their sales process. For example, in the future, salespeople will be able to use chatbots to get real-time insights about a client's concerns before meetings, making their interactions more effective. GenAI could also improve analytics by providing deeper insights into customer behavior and purchase history, leading to more personalized sales strategies.

"I think salespeople will use it a lot. I imagine salespeople will use it to help them in their sales process. For example, if they are driving to a customer and they are about to meet a CIO, they can use a chatbot and say, 'I am meeting with a healthcare CIO in half an hour. What are his main concerns about cloud computing, IT, etc.?' And the chatbot will tell them what to say and the key conversations to have with this person when they meet. Just having that computer in the background gives you that knowledge. You just talk to it and it will help you be that much more efficient." - Interviewee #5

Interviewee #8 predicted that as genAI helps customers become more informed early in their journey, the role of the salesperson will shift to addressing specific, complex queries. This could mean customers are almost fully decided on their purchases by the time they engage with a seller, potentially revolutionizing the sales process.

5.3.3. Future of People and Jobs

The rise of GenAI has sparked extensive discussions about its impact on the job market, particularly in fields like marketing and content creation. Surprisingly, during the conducted interviews without specific questions on this topic, nearly every participant expressed concerns or insights about how GenAI might replace humans in their jobs. This unexpected yet pervasive focus shows the anxiety and curiosity surrounding AI's role in the workforce.

Experienced marketers noted that many basic writing tasks are now being automated, reducing the need for human input and posing a threat to those just beginning their careers. There is a widespread fear that GenAI could eventually replace many positions in marketing and content creation altogether.

"There are a lot of basic writing tasks that there would not be any need to hire somebody on, so GenAI is going to be very disruptive in that respect. I think that is already happening. I have been in the marketing writing space for many years. If I was starting out and had just a few years experience, I would be very concerned about it." - Interviewee #6

"Sometimes, I question whether this will replace me at one point; will GenAI replace anyone that is in marketing? Will GenAI replace anyone that is in content creation? It could potentially be a situation." - Interviewee #4

This anxiety is compounded by the debate over the broader implications of GenAI on employment within the sector. Some believe that while GenAI will undoubtedly reduce the number of jobs, there will still be a need for human collaboration with AI. This middle ground suggests a future where fewer people are required to perform tasks that AI can handle more efficiently.

"There is a huge debate right there. Are we going to lose a lot of jobs and let this develop content on our behalf? I think it will be somewhere in the middle where I will probably be

using a lot more heavily and we might have a few less people working on things." - Interviewee #5

"When I think of content marketing specifically, I do think GenAI will put a lot of people out of jobs. For example, we have copywriters and copy editors, and I can imagine this will reduce a lot of time if we can have an AI tool that is trained on our brand and style guidelines rather than having someone work on it for a few hours. If the tool can just edit and review it within a few minutes, it will help us a lot." - Interviewee #9

On the other hand, other interviewees believed GenAI will not entirely replace human roles, but will significantly alter them. For example, this technology has turned good writers into good editors, according to interviewee #1 (See their quote on page 46). While AI can assist in developing marketing content, human oversight and creativity remain crucial and there will always be a need for humans. AI tools enhance efficiency rather than eliminate jobs. Interviewee #2 foresaw a future where fewer people might be needed for manual tasks, but the overall workforce could remain intact, performing more advanced and creative tasks (See their quote on page 46).

At the current stage, some interviewees mentioned that while no immediate job losses have occurred at their company due to AI, future hiring decisions might lean towards leveraging AI capabilities, potentially reducing the need for additional human resources. They stated that larger companies might prefer cost-effective AI solutions over expensive human labor, especially for basic writing tasks.

"No one has lost their jobs because of AI. I think in the future, when we are thinking about hiring, maybe we do not need as many people because we will just use it that much more to develop, especially on the content development side." - Interviewee #5

"I do not think anyone has been out of job because of AI within the marketing department yet, but it could have happened. If there was a job that was to be considered, maybe we found a tool that replaced that potential role." - Interviewee #9

To make sure that AI will not replace humans, the importance of continuous learning and adaptation is emphasized, particularly for more experienced workers. Embracing AI tools and

integrating them into daily workflows can enhance employability and job performance, ensuring that professionals stay relevant in a rapidly changing environment.

"There will be a shift in work for the people who are going to benefit or the people that have embraced this and know how to use it, so particularly for more experienced workers. Do not rest on your laurels. Retool, refine, and learn how to use these tools because they are going to help you do your job, but they are also going to be the way you are employable forward." - Interviewee #8

6. Analysis

6.1. Socio-Technical Systems

6.1.1. Task-Technology-Level

In this section, the focus is on tools, technology, and people. During the interviews, each participant highlighted the tools they use and those verified by their companies. These include ChatGPT, Claude, Microsoft Copilot, Jasper, DALL-E, Stable Diffusion, Sora, Perplexity AI, and Google Bard. The decision to choose a tool was influenced by factors such as company approval, pricing, recommendations from influencers and colleagues, tool features, and user experience after testing.

While these tools assist people in lots of areas of their work, it is clear that human expertise remains indispensable in ensuring the quality, accuracy, relevance, and authenticity of content. This aligns with STS principles where technical tools interact with human practices to achieve effective outcomes. One of the primary roles of human expertise in this context is to provide strategic oversight and maintain alignment with corporate guidelines and brand messaging. AI tools can generate drafts and suggestions, but they often require human review to ensure that the output aligns with the company's established narrative and strategic goals. This practice shows the importance of a "human in the loop" approach, where human oversight is integral to the process.

"There is a thing called 'human in the loop' in AI. You trust it but get it checked too. I think it is important to always check the quality. Any use of AI is always to be checked. If it seems a little skewed, maybe just do a quick audit." - Interviewee #7

Moreover, the customization and personalization of AI-generated content are critical areas where human intervention is crucial. As GenAI mostly produces generic content, the unique voice, style, and creativity that a human brings to the table are essential for creating compelling and engaging marketing materials. Professionals emphasized that AI can get them 60% there, but the remaining 40% requires human touch to infuse personality and tailor the message to specific audiences.

"GenAI tools can get you maybe 60% there and then you really need to customize it, maybe another 40% or something like that, and really personalize it. I think the biggest challenge is that the content is relatively generic, unless you really prompt it well. So, there is definitely the human element that you really need to infuse. You need to infuse your voice and your style into it, so it is less computer generic." - Interviewee #5

Furthermore, the role of human expertise extends to optimizing the use of GenAI through effective prompt engineering and strategic inputs. The ability to craft precise prompts and guide the AI towards desired outputs needs an understanding of both the technology and the marketing objectives. This expertise enabled professionals to maximize the benefits of GenAI, using it as a tool to assist rather than doing the whole work. This aligns with STS's focus on joint optimization of social and technical systems, where GenAI augments human capabilities rather than replacing them entirely.

The important point for companies in this regard is to consider socio-technical factors in an ongoing manner in their work system design (Appelbaum, 1997; Gorejena et al., 2016; Trist, 1981). However, unforeseen issues are expected during this process (Wilson, 2014). To address these challenges, a system must be established to detect and learn from them, adjusting the technology as necessary. Continuous design facilitates identifying and resolving issues within the STS (Salwei & Carayon, 2022). This attitude was mentioned in the interviews, stressing on the importance of test and try, especially as companies are still in the initial phases of GenAI adoption.

6.1.2. Organizational-Level

In this section, organizational-level topics related to the use of GenAI will be explored. Currently, none of the interviewees were required by their organizations to use this technology. However, several interviewees noted that they are encouraged to use GenAI, with their companies promoting it as a useful tool and expanding access to licenses.

The adoption of GenAI has not led to changes in organizational objectives or goals, nor has it altered the structures and processes within the marketing departments. Nonetheless, employees expected some automation of processes to be introduced in the near future. From an STS perspective, integrating technologies with social systems necessitates changes in objectives and structures. Consequently, the absence of these changes in organizations can be viewed as a drawback and a limitation in their adoption.

STS advocates for humanizing work and fostering workplace democracy, which are essential for effective AI integration. Thus, it is important to know who makes decisions in the companies regarding GenAI adoption and how they support their employees in the learning process. Interviews revealed that decision-making varied across companies. In many organizations, these decisions were made individually, with employees required to use company-approved tools and protect company data. In other organizations, decisions are made at the team level based on specific tasks. Additionally, marketing directors, AI councils, marketing technology groups, C-suite managers, security teams, and legal departments were involved in the decision-making process in different companies. This resonates with STS's emphasis on inclusive decision-making processes to ensure that technical solutions are compatible with organizational goals and social dynamics. According to this theory, democratic communication and decision-making are crucial for giving employees a voice when integrating technologies and making work changes (Mumford, 2006).

The learning process for GenAI also differed among individuals and organizations. Some employees began using GenAI out of personal curiosity and learned through hands-on experience. Others were taught by colleagues and influencers. Many organizations proactively educated their employees about GenAI, providing training courses and materials to support them. However, in some cases, this support was not offered in a structured manner. According to STS understanding, organizations that support employees with training and resources for GenAI adoption demonstrate a commitment to human-centered design, crucial for effective integration within socio-technical frameworks.

Overall, while the integration of GenAI into MarCom was encouraged and supported, its implementation and learning processes were highly individualized and varied across different organizations.

6.1.3. Environmental-Level

STS recognizes that external factors, such as regulations and competitive practices, influence organizational behavior. Hence, employees were asked about their competitors' usage of this technology. While none of the interviewees had specific knowledge about their competitors' practices, they expressed confidence that other organizations are at least testing GenAI. They would be surprised if any companies had not yet begun exploring its potential.

Another consideration at this level is the impact of external regulations and governance on companies. Although the interviews did not reveal insights on this topic, this may be due to the fact that awareness of regulatory issues varies among different roles within an organization. However, the literature review provided a comparison of region-specific governance and regulatory rules regarding GenAI usage, highlighting the importance of understanding these external factors.

6.2. Task-Technology Fit

6.2.1. Fitting GenAI to Marketing

When evaluating TTF for GenAI in MarCom within large IT companies, several key insights emerged from the experiences of professionals using these tools.

All the interviewees agreed that GenAI is a technology that fits great to the needs of MarCom tasks. This technology helps alleviate writer’s block and generates ideas quickly, enhancing the production process and content development. It allows individuals to speed up routine tasks, enabling them to focus more on creative work they enjoy. Additionally, the adaptability of these tools to different content types, such as blogs, email campaigns, and digital content, shows its versatility. Overall, the capabilities of GenAI align well with the demands of MarCom. This alignment suggests a contribution to improved efficiency and quality, according to the TTF model (Goodhue & Thompson, 1995).

Moreover, interviewees emphasized the importance of tailoring GenAI to their specific tasks through effective customization. This customization includes significant involvement in prompt development and iterative refinements. They argued that they are the ones who have to make this technology fit their tasks. As a result, while the features GenAI offers matter, the expertise and skills of the users in leveraging them are equally crucial.

"I have to make the tools fit. I make them fit. I customize the tools for what I am doing. I think that I get very involved in prompt development." - Interviewee #1

Another key point raised by the interviewees was their realistic expectations of GenAI tools. They viewed GenAI as an assistant that aids in faster and more efficient task completion, rather than a solution to create entire pieces of content. Most interviewees used GenAI to enhance and expedite their work, not to replace their own creative contributions. This approach not only saves time but also ensures higher quality and consistency in the final outputs.

"I am not expecting AI to create for me, but to enhance for me." - Interviewee #3

In general, as mentioned before, successful integration of GenAI into marketing tasks requires a balance between technological capabilities and human expertise. This can be a witness to the fact that current versions of AI are not capable enough to replace humans.

6.2.2. Measuring Performance Effects

Studying the performance effects of using GenAI in MarCom within large IT companies is crucial for understanding its alignment with the TTF and TPC models. This study used user evaluation to collect data on how users perceive the impact of GenAI on their performance. The majority of interviewees reported that GenAI has enhanced their performance by increasing speed, quality, and efficiency. Those who were uncertain about its impact noted that it is still too early to draw definitive conclusions.

However, a common theme in the interviews was the absence of concrete Key Performance Indicators (KPIs) directly linked to the use of GenAI. Many teams relied on anecdotal evidence and qualitative assessments to measure success. This approach reflects a broader industry tendency to evaluate content performance holistically rather than isolating individual elements influenced by AI. For instance, significant achievements, such as content developed with AI assistance being shared by high-profile executives, were seen as markers of success, even though these instances are not quantifiable through traditional KPIs.

Thus, while there was a recognition of improved content quality and efficiency due to AI, these improvements were not always captured in measurable terms. Some interviewees noted efficiency gains and enhanced communication quality, yet acknowledged the lack of substantial metrics to demonstrate these benefits tangibly. The qualitative improvements were evident in received feedback and the perceived enhancement in content quality, but they remain challenging to quantify precisely.

Moreover, some companies were beginning to incorporate AI-related metrics into existing frameworks, focusing on areas where automation and AI can be easily tracked, such as email open rates or event attendance driven by AI-targeted marketing. This evolution aligns with the adaptive nature of TTF theory, which encourages ongoing adjustments and improvements based on technological advancements and user feedback. However, the distinction between AI-enhanced content and traditionally created content remains blurred, complicating direct comparisons and evaluations.

Another significant point was the reliance on overall campaign performance rather than dissecting the contribution of individual content pieces influenced by AI. For example, evaluating the success of marketing efforts through lead generation and conversion rates offers a broader view of effectiveness, which dilutes the specific impact of AI tools.

In some cases, companies were exploring more structured approaches to measure AI effectiveness, such as quarterly audits for AI accuracy and engagement metrics. These efforts indicate a move towards establishing baselines and tracking improvements over time, though they were still in the early stages and often part of experimental "test and learn" phases.

6.3. Conceptual Framework Analysis

The findings of this research indicate that the conceptual framework effectively explains GenAI usage within the MarCom efforts of organizations. Interviews confirmed that the framework’s elements interrelate as depicted. The integration of technology, people, and tasks within organizational systems, as guided by STS and TTF principles, was evident in the synergy between GenAI tools and human expertise.

Additionally, this integration influenced and was influenced by the broader environment, as shown in the framework. Organizations adopting GenAI shape industry standards and consumer expectations, pushing competitors to follow suit. Conversely, regulatory frameworks, ethical standards, and market conditions impact how organizations implement GenAI, ensuring compliance and meeting external demands. This continuous interaction between the organization and its environment drives adaptive strategies, reflecting both internal innovations and external pressures.

At the organizational level, values influenced employees' attitudes and work practices. Marketing employees strive to convey their organizational values through their efforts, which reflects the role of organizational values and trust in shaping their activities.

At the environmental level, the framework's consideration of external regulations and ethics was validated by the interviews. All companies had guidelines or councils to ensure compliance with these external factors. However, interviewees demonstrated limited specific knowledge about ethical considerations and regulatory aspects. This gap highlights an area for improvement, where companies can focus more on educating employees to ensure a better and more ethical integration of technology into their work.

6.4. Validation

After the data analysis, two additional semi-structured interviews were conducted to help validate the research findings alongside literature review (For interview questions, see Appendix C). These interviews provided an opportunity to gather opinions on the results and to pose the main questions of the study once again. Then, their responses were compared with the findings. The new interviewees were professionals working at two large IT enterprises in the US, different from those of the previous interviewees. This approach was chosen to ensure a wider range of perspectives and to make the findings more reliable by including diverse viewpoints.

The interviewees' responses aligned with the findings. They used an in-house GenAI to optimize and augment human work. However, one interviewee noted that despite GenAI's ability to enhance pace and efficiency, it has not yet changed the overall performance. They

argued that GenAI, being a new technology, is not being utilized to its full potential. This highlights the opportunity for companies to offer more advanced training to their employees.

"I feel like there is more we can get out of GenAI. We are still asking questions like it is Google and not using it to its full potential. I want to get more out of it, but I just do not know how yet." - Interviewee #10

An interesting point raised by one interviewee was their concern that people might lose trust in brands if they notice the use of GenAI by companies. As a result, brands need to be transparent about their use of AI and balance automation with genuine human interaction.

Finally, the interviewees suggested that while GenAI may replace some jobs due to its efficiency, it is unlikely to fully replace skilled humans. They emphasized the ongoing need for human input in crafting prompts and refining AI-generated content, indicating that AI serves more as a tool to augment human work. They believed this integration could even lead to new roles. Although some companies may have already replaced higher-cost positions with AI, the interviewees had not observed this occurring in their own experiences yet.

7. Discussion

After the data has been analyzed and the findings reviewed, it is time to answer the research questions. In this section, the data from the literature review, theories, and findings are brought together to thoroughly explain the answers to each research question.

7.1. Current Usage of GenAI in MarCom (RQ1.1)

As stated in previous sections, MarCom is considered as a STS involving business, human practices, and technology in this research. The body of research in STS indicates that addressing both technical and social aspects together results in better outcomes, including more effective change, smoother worker transitions, and increased productivity.

This study supports these findings. When adopting GenAI for MarCom, large IT companies provided their employees with support, encouragement, training materials, and tool licenses, thereby addressing the social aspects. Simultaneously, they evaluated various tools and technologies to identify the best fit for their needs, addressing the technical aspects. The

perceived increases in productivity and efficiency observed in the interviews can be seen as a result of this joint optimization. However, although there is a need for restructuring work processes with these types of changes (Mumford, 2006), GenAI adoption does not seem to have caused any restructuring in large IT companies yet.

The interview findings and literature review show GenAI is currently being used in various MarCom tasks. The use cases can be categorized in five groups: content creation, information management, brainstorming and idea generation, operational support, and sentiment analysis and social media monitoring. Each category will be explained more in the following.

1. **Content Creation:** GenAI aids in drafting and creating various content types, including emails, blog posts, website content, and social media updates. It also supports derivative content, creative work, and content management tasks such as editing and summarizing.
2. **Information Management:** GenAI helps in processing large volumes of data, conducting research, and validating information.
3. **Brainstorming and Idea Generation:** The tool is used to overcome writer's block and generate initial ideas, titles, and drafts.
4. **Operational Support:** GenAI automates routine tasks like generating meeting notes and other operational support activities, freeing up time for employees.
5. **Sentiment Analysis and Social Media Monitoring:** This technology automates the extraction of insights from social media, improving trend analysis and enabling better engagement with relevant content.

While AI tools enhance many work areas, human expertise remains crucial for ensuring content quality, accuracy, and alignment with corporate guidelines. Human oversight is essential for reviewing AI-generated drafts, personalizing content, and providing strategic input, ensuring that AI supports rather than replaces human capabilities. This reflects the STS principle of optimizing both social and technical systems for effective outcomes.

7.2. Ethical Considerations When Using GenAI in Marketing (RQ1.2)

Ethical considerations in using GenAI include several key concerns. Unregulated GenAI poses significant risks such as copyright violations, disruption of labor markets, production of illegal content, and bias (Shumakova et al., 2023). Addressing these concerns is crucial, and current and upcoming laws aim to ensure ethical AI use. However, companies often resist measures like watermarking due to concerns over performance. In this research, interviewees mentioned they do not use a disclaimer in their AI-generated content, because AI is just an assistant and they are still the ones who write the piece and refine it.

Governance and regulation of GenAI vary globally. However, current regulatory frameworks are not fully equipped to address the unique characteristics of GenAI, which include dynamic context and scalability. Scholars propose new terminologies and regulatory frameworks tailored to GenAI systems, emphasizing transparency, observability, and democratic oversight to ensure responsible and trustworthy AI use.

Currently, the EU emphasizes data privacy, transparency, and accountability, categorizing AI systems by risk levels. The EU's AI Act imposes stringent regulations on high-risk systems, though some argue this may hinder innovation. In contrast, the US adopts a more liberal approach, integrating AI regulation into existing frameworks, with laws like the AI in Government Act and the National AI Initiative Act. State-level legislation, such as Connecticut's bill addressing AI bias and deepfakes, is also emerging. This difference between the regulatory system of these two regions shows that if this research was conducted in Europe instead of the US, it might have had different results regarding ethical considerations in organizations.

Interviews showed major tech companies have internal legal departments and AI councils to ensure ethical AI use and data protection. However, many marketing employees are unaware of specific AI regulatory guidelines, which raises concerns about the effectiveness of these governance measures. Improved training and communication are needed to ensure employees understand and follow AI ethics, not just branding rules, to secure and ethically use GenAI tools.

Most marketing professionals prioritize brand protection and company data confidentiality over broader ethical responsibilities like user data privacy and societal impact. There are several key ethical concerns when using GenAI in MarCom:

1. **Data Privacy and Confidentiality:** The risk of exposing sensitive company and client information when using AI tools is significant. Proper anonymization and the use of company-approved tools can help mitigate these risks.
2. **Transparency and Authenticity:** It is essential to disclose the use of AI in content creation to maintain trust and honesty.
3. **IP and Attribution:** Proper attribution for AI-generated content is crucial to avoid legal issues and ethical breaches. Plagiarism and the use of others' proprietary information without consent are concerns.
4. **Bias and Fairness:** AI tools can perpetuate biases if not trained on diverse datasets, requiring ongoing vigilance to detect and correct these biases.
5. **Quality and Overreliance:** Overuse of AI can lead to lower quality content, undermining the integrity of MarCom.
6. **Job Displacement:** The use of AI raises concerns about job security and the ethical implications of replacing human roles with automated systems.
7. **Professional and Legal Guidelines:** Adherence to legal and ethical guidelines is vital, with internal review processes ensuring responsible AI use.

Although this study focused on the US, the literature review offered insights into the situation in other parts of the world. Due to the novelty of the topic and a research gap in this area, few studies were available when this research was conducted. But, based on a study examining the adoption of GenAI across multiple industries in European organizations, employees seem to demonstrate a higher awareness and concern about the ethical implications of this technology there.

In the EU, protecting user data in GenAI systems is vital, necessitating compliance with regulations like the GDPR. There is a risk that GenAI can perpetuate societal biases, emphasizing the need for fairness in outputs. The lack of transparency complicates accountability, and companies face challenges in navigating a complex regulatory landscape that includes data privacy and security concerns, which can hinder innovation. Safeguarding sensitive information in GenAI systems is also a significant challenge. Despite these

concerns, people also recognize the benefits of GenAI, particularly its potential to enhance performance and increase speed (Orozco & Welin, 2024).

Overall, there is a need for improved awareness and training on AI ethics among employees to ensure responsible and effective use of GenAI tools. This aligns with TTF and STS theories, stressing on enhanced training for better implementation of GenAI in marketing.

7.3. GenAI Effects on Marketers' Performance (RQ1.3)

In STS theory, the technical subsystem consists of business processes and technologies that process inputs to generate outputs, thereby boosting system performance (Bostrom et al., 2009). Traditional business models often assume that advanced technology guarantees high production and performance. However, experience shows that success requires addressing both the social system and the technology (Gorejena et al., 2016). In other words, the collaboration of these two subsystems determines if a system's performance succeeds or fails (Walker et al., 2008). In this research, this collaboration was evident and may explain why interviewees perceived an improvement in their performance after adopting GenAI. However, without KPIs, the measurement of this improvement was mostly anecdotal.

Another way to look at performance effects is through a TTF lens. As indicated by this theory, the extent to which tasks and technology fit affects work performance and technology utilization (Goodhue & Thompson, 1995). Proper alignment and user expertise enhance performance, while mismatches can slow decision-making and increase errors. Additionally, specialized training can boost performance by improving user proficiency and accuracy (Goodhue et al., 2000).

Furthermore, researchers believe there is a statistical correlation between user evaluations of TTF and perceived performance (Goodhue et al., 2000). In this research, interviewees believed GenAI fits well with their tasks in MarCom. Companies also provided their employees with training to help them adopt this new technology and enhance their expertise. Hence, this is another explanation for the perceived improved performance by the interviewees.

Based on the TPC model, for a technology to impact individual performance positively, it needs to be used and fit the tasks it supports (Goodhue & Thompson, 1995). Consequently, performance impacts are influenced by both TTF and utilization (Angolano et al., 2012). Using this perspective, GenAI boosts employees' performance because it is used in their daily tasks and fits well to what they do and need. In the following, TPC model's key components are shown as defined by Goodhue and Thompson (1995). Each component is explained within the context of this research too:

1. **Technologies:** GenAI tools, such as ChatGPT, Microsoft Copilot, Claude, Jasper, etc.
2. **Tasks:** Content creation (Blog posts, emails, eBooks, website content, social media posts, etc.), content management, campaign planning and execution, creative work, research and analysis, social media management, influencer marketing, email marketing, internal communications, customer relationship management, reporting, advertising, operational tasks, strategy and planning.
3. **Individuals:** MarCom employees of large IT companies in the US who mostly perceived themselves as early adopters. They had skills to use different tools and technologies in their tasks and were curious to test different options even when they were not asked to do so. Their motivation was mostly to find a tool that fits their task requirements, enhances their performance, functions as their assistant, and increases speed and productivity.
4. **TTF:** Great fit between tasks and GenAI was seen according to the interviewees. Also, individuals believed they are the ones who need to make the tool fit their tasks and GenAI capabilities allowed them to do so.
5. **Utilization:** GenAI was frequently integrated into employees' daily tasks. Employees had the autonomy to decide when and how to use GenAI, as its usage was not mandated by their companies. They leveraged a variety of GenAI tools based on specific tasks and objectives. For instance, they utilized certain tools for generating textual content and others for creating visual outputs. When voice assistance was needed, they turned to voice-enabled tools, and for conversational interfaces, they opted for chatbot solutions.
6. **Impact of TTF on Utilization**: TTF positively impacted employees' utilization as they witnessed their improved outcomes. This was further discussed in "Benefits and Beneficial Aspects of GenAI in Marketing."

7. **Performance Impact**: Enhancements in efficiency, quality, productivity, and pace was mentioned by the interviewees. Some of them received improved feedback from their managers after using this technology.

In conclusion, the integration of GenAI into employees' tasks enhances performance by aligning with STS, TTF, and TPC. The collaboration between the technical and social subsystems, combined with a strong task-technology fit, result in improved work outcomes. Despite the lack of KPIs, the positive feedback from interviewees highlights GenAI's potential to transform MarCom. The TPC model underscores the importance of technology fit and utilization in driving these performance improvements.

7.4. GenAI's Influence on MarCom (RQ1)

GenAI is transforming MarCom within large IT companies by enhancing productivity, pace, and efficiency. It automates content creation, streamlining tasks like drafting blog posts and generating social media updates. This shift allows teams to focus on more strategic activities but also raises concerns about job security and creativity. With GenAI, the creative process increasingly involves developing effective prompts rather than crafting content itself. While GenAI aids in starting from scratch and generating ideas, it can also produce generic content and inaccuracies, demanding careful human oversight. Additionally, risks such as data security and brand consistency must be managed to fully leverage GenAI's benefits.

According to STS theory, integrating GenAI effectively requires optimizing both social and technical aspects. Companies have provided their employees with training material and guidelines, which has led to improvements in their tasks. However, no major restructuring has occurred yet, suggesting further alignment is needed.

From a performance perspective, TTF and TPC models emphasize that GenAI must align well with marketing tasks to boost performance. Positive feedback from users indicates good fit and improved outcomes, although performance measurements are still mostly anecdotal. It is worthwhile to note that GenAI resulting in higher performance levels should not lead to over-reliance on these tools.

Moreover, despite the prominent ethical concerns in this area, current regulations struggle to address the challenges fully, and there is a noted gap in employee awareness regarding ethical AI use. Enhancing training and communication on these issues is crucial and can result in a deeper understanding of these tools. This can ultimately improve performance and the overall technology implementation too.

Overall, while GenAI offers notable benefits in MarCom, addressing ethical concerns and ensuring effective technology integration are essential for maximizing its impact. The critical question remains whether GenAI can truly replace human creativity and lead to job displacement. This study shows GenAI has the potential to displace some jobs, particularly in basic writing and content creation tasks, as it automates many routine functions. However, it is unlikely to entirely replace human roles; instead, it will transform them, emphasizing the need for human oversight, creativity, and adaptation. This finding aligns with the evidence highlighted in the literature review.

8. Limitations

This research study is conducted at a stage when GenAI is still relatively a new phenomenon. This novelty poses challenges due to the limited body of literature and established frameworks available for reference. Additionally, there is a notable absence of research exploring the integration of STS and TTF theoretical models within the domain of marketing. This scarcity complicates the development of a robust theoretical foundation for the study.

Furthermore, although the researcher contacted a substantial number of employees (more than four hundred) at identified large IT companies in the US, the criteria for participation were restricted to individuals who were accessible and responsive within the designated research timeframe. Additionally, some employees who did not use GenAI in their work declined participation. Consequently, the finalized interviewees were predisposed to be interested in GenAI usage in their professional roles. This selection bias may impact the generalizability of the study findings beyond this specific subgroup of individuals.

Another limitation of the study is its geographical focus, as all interviewees were based in the US. This geographical restriction may limit the generalizability of the findings to other regions or countries with different cultural, economic, or regulatory contexts.

9. Future Research

First, this research primarily focused on the US. Conducting similar studies in other geographical locations could yield different results. Future research could explore how GenAI is perceived and utilized in diverse global contexts, offering a more comprehensive understanding of its impact and potential applications worldwide. Additionally, investigating different organizational sectors or departments could reveal variations in how GenAI is adopted and its effects on performance.

Moreover, conducting quantitative research could provide a more precise understanding of GenAI's impact on performance, complementing this study's qualitative approach based on user evaluations and perceived performance changes. Currently, companies have not yet established KPIs or measurement tools to track these changes accurately.

Last, given the novelty of GenAI at the time of this research, future studies have the opportunity to explore its effects and the changes it causes as the technology matures.

10. Conclusion

Today, content plays a crucial role in marketing, with AI-driven methods greatly influencing its creation (Kose & Sert, 2017). GenAI has impacted MarCom in large IT companies through its integration into various tasks, such as content creation, information management, and operational support. Companies have supported this integration with training and resources, addressing both social and technical aspects as per STS and TTF theories. However, necessary restructuring of work processes has not yet occurred, and ethical concerns remain significant.

Findings show the integration of GenAI into employees' tasks has enhanced performance by aligning with STS, TTF, and TPC. Despite the lack of KPIs, positive feedback from interviewees highlights GenAI's potential in this regard. Additionally, human expertise is an essential factor for ensuring content quality and alignment with corporate guidelines, reflecting the STS principle of optimizing social and technical systems for effective outcomes. While AI tools enhance work areas, human oversight is vital for reviewing AI-generated drafts, personalizing content, and providing strategic input.

Lastly, improved training and ethical awareness are needed to fully leverage GenAI's potential while maintaining responsible use. Marketing professionals are encouraged to expand their focus beyond brand protection and data confidentiality. After all, the choice of implementing or avoiding GenAI utilization rests on the unique circumstances of each company (Wahid et al., 2023). While some remain hesitant and cautious about adopting AI, maybe the time has come to carefully embrace it (Wirth, 2018).

11. Bibliography

Agarwal, R., Sambamurthy, V., & Stair, R. M. (2000). Research Report: The Evolving Relationship Between General and Specific Computer Self-Efficacy—An Empirical Assessment. *Information Systems Research*, *11*(4), 418–430.

Agyei, J., Sun, S., Abrokwah, E., Penney, E. K., & Ofori-Boafo, R. (2020). Influence of Trust on Customer Engagement: Empirical Evidence From the Insurance Industry in Ghana. *Sage Open*, *10*(1), 2158244019899104. https://doi.org/10.1177/2158244019899104

Alter, S. (2002). The Work System Method for Understanding Information Systems and Information Systems Research. *Communications of the Association for Information Systems*, *9*(1). https://doi.org/10.17705/1CAIS.00906

Alter, S. (2003). 18 Reasons Why IT-Reliant Work Systems Should Replace "The IT Artifact" as the Core Subject Matter of the IS Field. *Communications of the Association for Information Systems*, *12*(1). https://doi.org/10.17705/1CAIS.01223

AMA. (n.d.). Marketing Communications Archives. *American Marketing Association*. Retrieved May 29, 2024, from https://www.ama.org/topics/marcom/

Ammenwerth, E., Iller, C., & Mahler, C. (2006). IT-adoption and the interaction of task, technology and individuals: A fit framework and a case study. *BMC Medical Informatics and Decision Making*, *6*(1), 3. https://doi.org/10.1186/1472-6947-6-3

Angolano, C. C., Guzman, I. R., Garmon, M. S., & Navarrete, C. J. (2012). Information technology security task-technology fit based on the technology-to-performance chain theory. *Proceedings of the 50th Annual Conference on Computers and People Research*, 17–26. https://doi.org/10.1145/2214091.2214100

Appelbaum, S. H. (1997). Socio‐technical systems theory: An intervention strategy for organizational development. *Management Decision*, *35*(6), 452–463. https://doi.org/10.1108/00251749710173823

Atlas, S. (2023). *ChatGPT for Higher Education and Professional Development: A Guide to Conversational AI*. https://digitalcommons.uri.edu/cba_facpubs/548

Avis, J. (2018). Socio-technical imaginary of the fourth industrial revolution and its implications for vocational education and training: A literature review. *Journal of Vocational Education & Training*, *70*(3), 337–363. https://doi.org/10.1080/13636820.2018.1498907

Baum, K., Bryson, J., Dignum, F., Dignum, V., Grobelnik, M., Hoos, H., Irgens, M., Lukowicz, P., Muller, C., Rossi, F., Shawe-Taylor, J., Theodorou, A., & Vinuesa, R. (2023). From fear to action: AI governance and opportunities for all. *Frontiers in Computer Science*, *5*. https://doi.org/10.3389/fcomp.2023.1210421

Baxter, G., & Sommerville, I. (2011). Socio-technical systems: From design methods to systems engineering. *Interacting with Computers*, *23*(1), 4–17. https://doi.org/10.1016/j.intcom.2010.07.003

Berg, J., Raj, M., & Seamans, R. (2023). Capturing Value from Artificial Intelligence. *Academy of Management Discoveries*. https://doi.org/10.5465/amd.2023.0106

Bostrom, R. P., Gupta, S., & Thomas, D. (2009). A Meta-Theory for Understanding Information Systems Within Sociotechnical Systems. *Journal of Management Information Systems*, *26*(1), 17–48. https://doi.org/10.2753/MIS0742-1222260102

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Brooks, R. (2022, September 28). *What are marketing communications?* University of Lincoln. https://online.lincoln.ac.uk/what-are-marketing-communications/

Brüns, J. D., & Meißner, M. (2024). Do you create your content yourself? Using generative artificial intelligence for social media content creation diminishes perceived brand authenticity. *Journal of Retailing and Consumer Services*, *79*, 103790.

https://doi.org/10.1016/j.jretconser.2024.103790

Campbell, C., Sands, S., Ferraro, C., Tsao, H.-Y. (Jody), & Mavrommatis, A. (2020). From data to action: How marketers can leverage AI. *Business Horizons*, *63*(2), 227–243. https://doi.org/10.1016/j.bushor.2019.12.002

Cao, Y., Li, S., Liu, Y., Yan, Z., Dai, Y., Yu, P. S., & Sun, L. (2023). *A Comprehensive Survey of AI-Generated Content (AIGC): A History of Generative AI from GAN to ChatGPT* (arXiv:2303.04226). arXiv. https://doi.org/10.48550/arXiv.2303.04226

Cardoso, A., Gabriel, M., Figueiredo, J., Oliveira, I., Rêgo, R., Silva, R., Oliveira, M., & Meirinhos, G. (2022). Trust and Loyalty in Building the Brand Relationship with the Customer: Empirical Analysis in a Retail Chain in Northern Brazil. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(3), 109. https://doi.org/10.3390/joitmc8030109

Cherns, A. (1976). The Principles of Sociotechnical Design. *Human Relations*, *29*(8), 783–792. https://doi.org/10.1177/001872677602900806

Chimbga, B. (2023). Exploring the Ethical and Societal Concerns of Generative AI in Internet of Things (IoT) Environments. In A. Pillay, E. Jembere, & A. J. Gerber (Eds.), *Artificial Intelligence Research* (pp. 44–56). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-49002-6_4

Chintalapati, S., & Pandey, S. K. (2022). Artificial intelligence in marketing: A systematic literature review. *International Journal of Market Research*, *64*(1), 38–68. https://doi.org/10.1177/14707853211018428

Cummings, T. G. (1978). Self-Regulating Work Groups: A Socio-Technical Synthesis. *The Academy of Management Review*, *3*(3), 625–634. https://doi.org/10.2307/257551

Daft, R. L., & Lengel, R. H. (1986). Organizational Information Requirements, Media Richness and Structural Design. *Management Science*, *32*(5), 554–571.

D'Ambra, J., Wilson, C. S., & Akter, S. (2013). Application of the task-technology fit model to structure and evaluate the adoption of E-books by Academics. *Journal of the American Society for Information Science and Technology*, *64*(1), 48–64. https://doi.org/10.1002/asi.22757

Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2020). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, *48*(1), 24–42. https://doi.org/10.1007/s11747-019-00696-0

Davies, L. E. (1972). *Design of Jobs*. Penguin.

Davis, M. C., Challenger, R., Jayewardene, D. N. W., & Clegg, C. W. (2014). Advancing socio-technical systems thinking: A call for bravery. *Applied Ergonomics*, *45*(2, Part A), 171–180. https://doi.org/10.1016/j.apergo.2013.02.009

De Bruyn, A., Viswanathan, V., Beh, Y. S., Brock, J. K.-U., & von Wangenheim, F. (2020). Artificial Intelligence and Marketing: Pitfalls and Opportunities. *Journal of Interactive Marketing*, *51*, 91–105. https://doi.org/10.1016/j.intmar.2020.04.007

Dennis, A. R., & Valacich, J. S. (2001). Conducting Experimental Research in Information Systems. *Communications of the Association for Information Systems*, *7*(1). https://doi.org/10.17705/1CAIS.00705

Díaz-Rodríguez, N., Del Ser, J., Coeckelbergh, M., López de Prado, M., Herrera-Viedma, E., & Herrera, F. (2023). Connecting the dots in trustworthy Artificial Intelligence: From AI principles, ethics, and key requirements to responsible AI systems and regulation. *Information Fusion*, *99*, 101896. https://doi.org/10.1016/j.inffus.2023.101896

Dillon, A. (2000). Group Dynamics Meet Cognition: Combining Socio-Technical Concepts and Usability Engineering in the Design of Information Systems. In E. Coakes, D. Willis, & R. Lloyd-Jones (Eds.), *The New SocioTech: Graffiti on the Long Wall* (pp. 119–125). Springer. https://doi.org/10.1007/978-1-4471-0411-7_11

Dwivedi, Y. K., Hughes, L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., Duan, Y., Dwivedi, R., Edwards, J., Eirug, A., Galanos, V., Ilavarasan, P. V., Janssen, M., Jones, P., Kar, A. K., Kizgin, H., Kronemann, B., Lal, B., Lucini, B., … Williams, M. D. (2021). Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. *International Journal of Information Management*, *57*, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., … Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, *71*. https://doi.org/10.1016/j.ijinfomgt.2023.102642

Emery, F. E., & Bucklow, M. (1978). *The Emergence of a New Paradigm of Work*. Centre for Continuing Education, Australian National University.

Emery, F., & Trist, E. (1960). Sociotechnical systems. In C. W. Churchman & M. Verhulst (Eds.), *Management Sciences, Models and Techniques* (Vol. 2). Pergamon Press.

Ferrara, E. (2024). GenAI against humanity: Nefarious applications of generative artificial intelligence and large language models. *Journal of Computational Social Science*. https://doi.org/10.1007/s42001-024-00250-1

Ferrari, F., van Dijck, J., & van den Bosch, A. (2023). Observe, inspect, modify: Three conditions for generative AI governance. *New Media & Society*, 14614448231214811. https://doi.org/10.1177/14614448231214811

Fui-Hoon Nah, F., Zheng, R., Cai, J., Siau, K., & Chen, L. (2023). Generative AI and

ChatGPT: Applications, challenges, and AI-human collaboration. *Journal of Information Technology Case and Application Research*, *25*(3), 277–304. https://doi.org/10.1080/15228053.2023.2233814

Fuller, R. M., & Dennis, A. R. (2009). Does Fit Matter? The Impact of Task-Technology Fit and Appropriation on Team Performance in Repeated Tasks. *Information Systems Research*, *20*(1), 2–17. https://doi.org/10.1287/isre.1070.0167

García-Peñalvo, F., & Vázquez-Ingelmo, A. (2023). What Do We Mean by GenAI? A Systematic Mapping of The Evolution, Trends, and Techniques Involved in Generative AI. *UNIR*. https://doi.org/10.9781/ijimai.2023.07.006

Gibbs, G. R. (2007). *Analyzing Qualitative Data*. SAGE Publications, Ltd. https://doi.org/10.4135/9781849208574

Gilardi, F., Alizadeh, M., & Kubli, M. (2023). ChatGPT Outperforms Crowd-Workers for Text-Annotation Tasks. *Proceedings of the National Academy of Sciences*, *120*(30), e2305016120. https://doi.org/10.1073/pnas.2305016120

Gillath, O., Ai, T., Branicky, M. S., Keshmiri, S., Davison, R. B., & Spaulding, R. (2021). Attachment and trust in artificial intelligence. *Computers in Human Behavior*, *115*, 106607. https://doi.org/10.1016/j.chb.2020.106607

Gonçalves, A., Costa Pinto, D., Rita, P., & Pires, T. (2023). Artificial Intelligence and Its Ethical Implications for Marketing. *Emerging Science Journal*, *7*, 313–327. https://doi.org/10.28991/ESJ-2023-07-02-01

Goodhue, D. L., Klein, B. D., & March, S. T. (2000). User evaluations of IS as surrogates for objective performance. *Information & Management*, *38*(2), 87–101. https://doi.org/10.1016/S0378-7206(00)00057-4

Goodhue, D. L., & Thompson, R. L. (1995). Task-Technology Fit and Individual Performance. *MIS Quarterly*, *19*(2), 213–236. https://doi.org/10.2307/249689

Gorejena, K., Mavetera, N., & Velempini, M. (2016). A critique and potency of socio-technical systems theory: A quest for broadband growth and penetration. *Public and Municipal Finance*, *5*(2), 7–19. https://doi.org/10.21511/pmf.5(2).2016.01

Guest, G., MacQueen, K. M., & Namey, E. E. (2011). *Applied Thematic Analysis*. SAGE Publications.

Hacker, P., Engel, A., & Mauer, M. (2023). Regulating ChatGPT and other Large Generative AI Models. *Proceedings of the 2023 ACM Conference on Fairness, Accountability, and Transparency*, 1112–1123. https://doi.org/10.1145/3593013.3594067

Haigh, S. (2024, April 25). *Connecticut Senate passes wide-ranging bill to regulate AI. But its fate remains uncertain*. AP News. https://apnews.com/article/artificial-intelligence-ai-connecticut-regulation-b004b4477ac20cc365317edff9f7351b

Helberger, N., & Diakopoulos, N. (2023). ChatGPT and the AI Act. *Internet Policy Review*, *12*(1). https://doi.org/10.14763/2023.1.1682

Hoel, E. (2024, March 29). A.I.-Generated Garbage Is Polluting Our Culture. *The New York Times*. https://www.nytimes.com/2024/03/29/opinion/ai-internet-x-youtube.html

Hsu, S.-F., & Liou, S. (2021). Artificial Intelligence Impact on Digital Content Marketing Research. *9th International Conference on Orange Technology (ICOT)*, 1–4. https://doi.org/10.1109/ICOT54518.2021.9680666

Huang, M.-H., & Rust, R. T. (2021). A strategic framework for artificial intelligence in marketing. *Journal of the Academy of Marketing Science*, *49*(1), 30–50. https://doi.org/10.1007/s11747-020-00749-9

Huh, J., Nelson, M. R., & Russell, C. A. (2023). ChatGPT, AI Advertising, and Advertising Research and Education. *Journal of Advertising*, *52*(4), 477–482. https://doi.org/10.1080/00913367.2023.2227013

Kar, A. K., Varsha, P. S., & Rajan, S. (2023). Unravelling the Impact of Generative Artificial Intelligence (GAI) in Industrial Applications: A Review of Scientific and Grey Literature. *Global Journal of Flexible Systems Management*, *24*(4), 659–689. https://doi.org/10.1007/s40171-023-00356-x

Kelly, J. E. (1978). A Reappraisal of Sociotechnical Systems Theory. *Human Relations*, *31*(12), 1069–1099. https://doi.org/10.1177/001872677803101204

Kiggundu, M. N. (1986). Limitations to the Application of Sociotechnical Systems In Developing Countries. *The Journal of Applied Behavioral Science*, *22*(3), 341–353. https://doi.org/10.1177/002188638602200312

Kim, J., Giroux, M., & Lee, J. C. (2021). When do you trust AI? The effect of number presentation detail on consumer trust and acceptance of AI recommendations. *Psychology & Marketing*, *38*(7), 1140–1155. https://doi.org/10.1002/mar.21498

Kopalle, P. K., Gangwar, M., Kaplan, A., Ramachandran, D., Reinartz, W., & Rindfleisch, A. (2022). Examining artificial intelligence (AI) technologies in marketing via a global lens: Current trends and future research opportunities. *International Journal of Research in Marketing*, *39*(2), 522–540. https://doi.org/10.1016/j.ijresmar.2021.11.002

Kose, U., & Sert, S. (2017). Improving Content Marketing Processes With the Approaches by Artificial Intelligence. *Ecoforum*, *6*(1), 8.

Kowalczyk, P., Röder, M., & Thiesse, F. (2023). Nudging Creativity in Digital Marketing with Generative Artificial Intelligence: Opportunities and Limitations. *ECIS 2023 Research-in-Progress Papers*. https://aisel.aisnet.org/ecis2023_rip/22

Kozinets, R. V., & Gretzel, U. (2021). Commentary: Artificial Intelligence: The Marketer's Dilemma. *Journal of Marketing*, *85*(1), 156–159. https://doi.org/10.1177/0022242920972933

Krzysztof Wach, Cong Doanh Duong, Joanna Ejdys, Rūta Kazlauskaitė, Pawel Korzynski, Grzegorz Mazurek, Joanna Paliszkiewicz, & Ewa Ziemba. (2023). The dark side of generative artificial intelligence: A critical analysis of controversies and risks of ChatGPT. *Entrepreneurial Business and Economics Review*, *11*(2), 7–30. https://doi.org/10.15678/EBER.2023.110201

Kshetri, N., Dwivedi, Y. K., Davenport, T. H., & Panteli, N. (2024). Generative artificial intelligence in marketing: Applications, opportunities, challenges, and research agenda. *International Journal of Information Management*, *75*, 102716. https://doi.org/10.1016/j.ijinfomgt.2023.102716

Kulp, P. (2023, March 6). *Generative AI Is Already Changing How Creatives Do Their Jobs*. https://www.adweek.com/programmatic/how-generative-ai-is-already-changing-how-creatives-do-their-jobs/

Kushwaha, A. K., Kumar, P., & Kar, A. K. (2021). What impacts customer experience for B2B enterprises on using AI-enabled chatbots? Insights from Big data analytics. *Industrial Marketing Management*, *98*, 207–221. https://doi.org/10.1016/j.indmarman.2021.08.011

Leavitt, H. J. (1962). *Applied organizational change in industry: Structural, technological and humanistic approaches*. Carnegie Institute of Technology, Graduate School of Industrial Administration.

Li, J., Cai, X., & Cheng, L. (2023). Legal regulation of generative AI: A multidimensional construction. *International Journal of Legal Discourse*, *8*(2), 365–388. https://doi.org/10.1515/ijld-2023-2017

Lim, W. M., Gunasekara, A., Pallant, J. L., Pallant, J. I., & Pechenkina, E. (2023). Generative AI and the future of education: Ragnarök or reformation? A paradoxical perspective from management educators. *The International Journal of Management Education*,

21(2), 100790. https://doi.org/10.1016/j.ijme.2023.100790

Luckett, J. (2023). Regulating Generative AI: A Pathway to Ethical and Responsible Implementation. *International Journal on Cybernetics & Informatics*, *12*(5), 47–65. https://doi.org/10.5121/ijci.2023.120508

Ma, L., & Sun, B. (2020). Machine learning and AI in marketing – Connecting computing power to human insights. *International Journal of Research in Marketing*, *37*(3), 481–504. https://doi.org/10.1016/j.ijresmar.2020.04.005

Mayahi, S., & Vidrih, M. (2022). *The Impact of Generative AI on the Future of Visual Content Marketing*. https://doi.org/10.48550/arXiv.2211.12660

McCradden, M. D., Joshi, S., Anderson, J. A., & London, A. J. (2023). A normative framework for artificial intelligence as a sociotechnical system in healthcare. *Patterns*, *4*(11), 100864. https://doi.org/10.1016/j.patter.2023.100864

McGill, T. J., & Klobas, J. E. (2009). A task–technology fit view of learning management system impact. *Computers & Education*, *52*(2), 496–508. https://doi.org/10.1016/j.compedu.2008.10.002

Mcgrath, J. E., & Hollingshead, A. B. (1993). Putting the 'Group' Back in Group Support Systems: Some Theoretical Issues about Dynamic Processes in Groups with Technological Enhancements. In L. M. Jessup & J. S. Valacich (Eds.), *Group Support Systems: New Perspectives* (pp. 78–96). Macmillan. https://cir.nii.ac.jp/crid/1572543025244446720

Meskó, B., & Topol, E. J. (2023). The imperative for regulatory oversight of large language models (or generative AI) in healthcare. *Npj Digital Medicine*, *6*(1), 1–6. https://doi.org/10.1038/s41746-023-00873-0

Mgiba, F. M. (2020). Artificial intelligence, marketing management, and ethics: Their effect on customer loyalty intentions: a conceptual study. *The Retail and Marketing Review*,

16(2), 18–35. https://doi.org/10.10520/ejc-irmr1-v16-n2-a3

Miner, J. B. (2015). Socio-Technical Systems Theory. In *Organizational Behavior 2: Essential Theories of Process and Structure*. Routledge.

Mondal, S., Das, S., & Vrana, V. G. (2023). How to Bell the Cat? A Theoretical Review of Generative Artificial Intelligence towards Digital Disruption in All Walks of Life. *Technologies*, *11*(2), Article 2. https://doi.org/10.3390/technologies11020044

Montuori, A. (2011). Systems Approach. In M. A. Runco & S. R. Pritzker (Eds.), *Encyclopedia of Creativity* (2nd ed., pp. 414–421). Academic Press. https://doi.org/10.1016/B978-0-12-375038-9.00212-0

Mumford, E. (2003). *Redesigning Human Systems*. Irm Pr.

Mumford, E. (2006). The story of socio-technical design: Reflections on its successes, failures and potential. *Information Systems Journal*, *16*(4), 317–342. https://doi.org/10.1111/j.1365-2575.2006.00221.x

Mutoffar, M. M., Kuswayati, S., Anggraeny, F. T., & Sumarni, T. (2023). Exploring the Potential of ChatGPT in Improving Online Marketing and Promotion of MSMEs. *Jurnal Minfo Polgan*, *12*(1), Article 1. https://doi.org/10.33395/jmp.v12i2.12440

Noy, S., & Zhang, W. (2023). *Experimental Evidence on the Productivity Effects of Generative Artificial Intelligence* (SSRN Scholarly Paper 4375283). https://doi.org/10.2139/ssrn.4375283

Orlikowski, W. J., & Barley, S. R. (2001). Technology and Institutions: What Can Research on Information Technology and Research on Organizations Learn from Each Other? *MIS Quarterly*, *25*(2), 145–165. https://doi.org/10.2307/3250927

Orozco, J. M., & Welin, O. (2024). *What drives European organizations to invest in Generative AI, and what challenges do they face in 2023-2024?* [Blekinge Institute of Technology]. https://www.diva-portal.org/smash/record.jsf?pid=diva2:1878310

Pasmore, W. A. (1995). Social Science Transformed: The Socio-Technical Perspective. *Human Relations*, *48*(1), 1–21. https://doi.org/10.1177/001872679504800101

Paul, J., Ueno, A., & Dennis, C. (2023). ChatGPT and consumers: Benefits, Pitfalls and Future Research Agenda. *International Journal of Consumer Studies*, *47*(4), 1213–1225. https://doi.org/10.1111/ijcs.12928

Peres, R., Schreier, M., Schweidel, D., & Sorescu, A. (2023). On ChatGPT and beyond: How generative artificial intelligence may affect research, teaching, and practice. *International Journal of Research in Marketing*, *40*(2), 269–275. https://doi.org/10.1016/j.ijresmar.2023.03.001

Pierson, J., Kerr, A., Robinson, S. C., Fanni, R., Steinkogler, V. E., Milan, S., & Zampedri, G. (2023). Governing artificial intelligence in the media and communications sector. *Internet Policy Review*, *12*(1). https://policyreview.info/articles/governing-artificial-intelligence-media-and-communications-sector

Rai, A. (2020). Explainable AI: From black box to glass box. *Journal of the Academy of Marketing Science*, *48*(1), 137–141. https://doi.org/10.1007/s11747-019-00710-5

Rane, N. (2023). *ChatGPT and Similar Generative Artificial Intelligence (AI) for Smart Industry: Role, Challenges and Opportunities for Industry 4.0, Industry 5.0 and Society 5.0* (SSRN Scholarly Paper 4603234). https://doi.org/10.2139/ssrn.4603234

Rivas, P., & Zhao, L. (2023). Marketing with ChatGPT: Navigating the Ethical Terrain of GPT-Based Chatbot Technology. *AI*, *4*(2), Article 2. https://doi.org/10.3390/ai4020019

Rogers, E. M. (1962). *Diffusion of Innovations*. Free Press of Glencoe.

Routray, B. B. (2024). *The Spectre of Generative AI Over Advertising, Marketing, and*

Branding. TechRxiv. https://doi.org/10.22541/au.170534566.63147021/v1

Sætra, H. S. (2023). Generative AI: Here to stay, but for good? *Technology in Society*, *75*, 102372. https://doi.org/10.1016/j.techsoc.2023.102372

Salwei, M. E., & Carayon, P. (2022). A Sociotechnical Systems Framework for the Application of Artificial Intelligence in Health Care Delivery. *Journal of Cognitive Engineering and Decision Making*, *16*(4), 194–206. https://doi.org/10.1177/15553434221097357

Saputra, R., Nasution, M. I. P., & Dharma, B. (2023). The Impact of Using AI Chat GPT on Marketing Effectiveness: A Case Study on Instagram Marketing. *Indonesian Journal of Economics and Management*, *3*(3), Article 3. https://doi.org/10.35313/ijem.v3i3.4936

Shin, D. (2021). How do people judge the credibility of algorithmic sources? *AI & SOCIETY*, *37*(1), 81–96. https://doi.org/10.1007/s00146-021-01158-4

Shumakova, N. I., Lloyd, J. J., & Titova, E. V. (2023). Towards Legal Regulations of Generative AI in the Creative Industry. *Journal of Digital Technologies and Law*, *1*(4), Article 4. https://doi.org/10.21202/jdtl.2023.38

Silverman, D. (1998). Qualitative research: Meanings or practices? *Information Systems Journal*, *8*(1), 3–20. https://doi.org/10.1046/j.1365-2575.1998.00002.x

Sofaer, S. (1999). Qualitative methods: What are they and why use them? *Health Services Research*, *34*(5), 1101–1118.

Sohail, S. S., Farhat, F., Himeur, Y., Nadeem, M., Madsen, D. Ø., Singh, Y., Atalla, S., & Mansoor, W. (2023). Decoding ChatGPT: A taxonomy of existing research, current challenges, and possible future directions. *Journal of King Saud University - Computer and Information Sciences*, *35*(8), 101675. https://doi.org/10.1016/j.jksuci.2023.101675

Sony, M., & Naik, S. (2020). Industry 4.0 integration with socio-technical systems theory: A systematic review and proposed theoretical model. *Technology in Society*, *61*, 101248. https://doi.org/10.1016/j.techsoc.2020.101248

Stahl, B. C., & Eke, D. (2024). The ethics of ChatGPT – Exploring the ethical issues of an emerging technology. *International Journal of Information Management*, *74*, 102700. https://doi.org/10.1016/j.ijinfomgt.2023.102700

Sterne, J. (2017). *Artificial Intelligence for Marketing: Practical Applications*. John Wiley & Sons.

Stokel-Walker, C. (2023). ChatGPT listed as author on research papers: Many scientists disapprove. *Nature*, *613*(7945), 620–621. https://doi.org/10.1038/d41586-023-00107-z

Stokel-Walker, C., & Van Noorden, R. (2023). What ChatGPT and generative AI mean for science. *Nature*, *614*(7947), 214–216. https://doi.org/10.1038/d41586-023-00340-6

Sturm, T., & Peters, F. (2020). The Impact of Artificial Intelligence on Individual Performance: Exploring the Fit between Task, Data, and Technology. *ECIS 2020 Research Papers*. https://aisel.aisnet.org/ecis2020_rp/200

Sun, T. Q., & Medaglia, R. (2019). Mapping the challenges of Artificial Intelligence in the public sector: Evidence from public healthcare. *Government Information Quarterly*, *36*(2), 368–383. https://doi.org/10.1016/j.giq.2018.09.008

Tai, M. C.-T. (2020). The impact of artificial intelligence on human society and bioethics. *Tzu-Chi Medical Journal*, *32*(4), 339–343. https://doi.org/10.4103/tcmj.tcmj_71_20

Talarico, D. (2023). An open AI roundup: What marketers are saying about ChatGPT. *Dean and Provost*, *24*(11), 5–8. https://doi.org/10.1002/dap.31219

Thukral, V., Latvala, L., Swenson, M., & Horn, J. (2023). Customer journey optimisation using large language models: Best practices and pitfalls in generative AI. *Applied*

Marketing Analytics, *9*(3), 281–292.

Trist, E. (1981). *The Evolution of Socio-technical Systems: A Conceptual Framework and an Action Research Program*. Ontario Ministry of Labour, Ontario Quality of Working Life Centre.

Trist, E., Murray, H., & Trist, B. (Eds.). (1993). *The Social Engagement of Social Science, a Tavistock Anthology, Volume 2: The Socio-Technical Perspective*. University of Pennsylvania Press.

van Dis, E. A. M., Bollen, J., Zuidema, W., van Rooij, R., & Bockting, C. L. (2023). ChatGPT: Five priorities for research. *Nature*, *614*(7947), 224–226. https://doi.org/10.1038/d41586-023-00288-7

van Esch, P., & Stewart Black, J. (2021). Artificial Intelligence (AI): Revolutionizing Digital Marketing. *Australasian Marketing Journal*, *29*(3), 199–203. https://doi.org/10.1177/18393349211037684

Verma, S., Sharma, R., Deb, S., & Maitra, D. (2021). Artificial intelligence in marketing: Systematic review and future research direction. *International Journal of Information Management Data Insights*, *1*(1), 100002. https://doi.org/10.1016/j.jjimei.2020.100002

von Eschenbach, W. J. (2021). Transparency and the Black Box Problem: Why We Do Not Trust AI. *Philosophy & Technology*, *34*(4), 1607–1622. https://doi.org/10.1007/s13347-021-00477-0

Wahid, R., Mero, J., & Ritala, P. (2023, July 1). *Generative AI for Content Marketing: Helpful or Harmful?* Global Fashion Management Conference. https://doi.org/10.15444/GMC2023.11.02.04

Walker, G. H., Stanton, N. A., Salmon, P. M., & Jenkins, D. P. (2008). A review of sociotechnical systems theory: A classic concept for new command and control

paradigms. *Theoretical Issues in Ergonomics Science*, *9*(6), 479–499. https://doi.org/10.1080/14639220701635470

Walsham, G. (2017). ICT4D research: Reflections on history and future agenda. *Information Technology for Development*, *23*(1), 18–41. https://doi.org/10.1080/02681102.2016.1246406

Weber, L. (2019). *Authentic Marketing: How to Capture Hearts and Minds Through the Power of Purpose*. John Wiley & Sons.

Wilson, J. R. (2014). Fundamentals of systems ergonomics/human factors. *Applied Ergonomics*, *45*(1), 5–13. https://doi.org/10.1016/j.apergo.2013.03.021

Wirth, N. (2018). Hello marketing, what can artificial intelligence help you with? *International Journal of Market Research*, *60*(5), 435–438. https://doi.org/10.1177/1470785318776841

Yakimova, Y., & Ojamo, J. (2024, March 13). *Artificial Intelligence Act: MEPs adopt landmark law*. European Parliament. https://www.europarl.europa.eu/news/en/press-room/20240308IPR19015/artificial-intelligence-act-meps-adopt-landmark-law

Yoo, S.-C. & Diana Piscarac. (2023). Generative AI and its Implications for Modern Marketing: Analyzing Potential Challenges and Opportunities. *International Journal of Advanced Smart Convergence*, *12*(3), 175–185. https://doi.org/10.7236/IJASC.2023.12.3.175

12. Appendices

12.1. Appendix A - Interview Guide

Introduction

- My name is Elham Farahmand, and I am a graduate student at Aalborg University in Copenhagen, which is a partner institution in the European Union's Erasmus Mundus Joint Master's Degree program in Digital Communication Leadership (https://dclead.eu). Currently, I am a visiting graduate researcher at UCLA.

- The purpose of this interview is to gather information and gain your perspectives on the role of generative AI (GenAI) in marketing communications.

- Interview will be conducted via Microsoft Teams and will take approximately 1 hour.

- If you agree, the interview will be recorded for transcription and data analysis.

- Confidentiality: Your responses will be kept strictly confidential; the information you provide will be used solely for research purposes. All data and records generated in this study will be stored securely by the university and discarded securely after the study is completed. Neither you nor your organization will be identified in any documents or publications produced by this study, without your express permission. If you have any questions regarding your participation, or the collection and use of data for this study, please contact me at efarah22@student.aau.dk, or the Aalborg University faculty supervisor for this project, Prof. Anders Henten at henten@es.aau.dk.

Interview Questions

1. Could you tell me a little about your career background so far?

    1.1. In your experience, what do you think makes marketing effective?

    1.2. Are you familiar with GenAI tools, such as ChatGPT?

2. In your current organization, have you or your team used GenAI tools for marketing communications activities?

    2.1. If so, what specific tasks have you used GenAI tools for?

    2.2. How do these tools fit your tasks' requirements?

    2.3. How do you balance the technical capabilities of these tools with your team's expertise?

    2.4. How did you and your team learn about using AI?

    2.5. Did you need to adjust your processes or objectives once you started using AI? If so, in what ways?

    2.6. What aspects of GenAI tools have been most beneficial or productive in your marketing

    activities?

    2.7. What challenges have you encountered while using AI tools?

    2.8. Have AI tools affected your performance and outcomes of your marketing efforts? If so, in what ways?

    2.9. How do you measure those outcomes and the effectiveness of using AI?

    2.10. Who plays a role in decision making processes regarding using AI tools?

3. Do your competitors use GenAI tools for marketing?

    3.1. In your view, which of them use it in the most effective way?

    3.2. What sets them apart, with respect to AI?

4. What legal or professional standards guide your own marketing practice, or your firm's marketing efforts?

    4.1. Tell me about the values of your organization and how you try to convey them in your marketing efforts.

    4.2. Does AI help you meet those standards or communicate your organization's values?

4.3. What potential ethical problems do you see in using these tools?

4.4. What might fix these problems?

4.5. In your organization, what ethical considerations do you have when using these tools?

5. Looking ahead, how might AI affect marketing practice in IT, say in the next five years?

5.1. What would you expect to change, or stay the same?

12.2. Appendix B - Codebook

#	**Theme**	**Sub-theme**	**Codes**
1	GenAI Usage	Content Creation (Use Case)	Writing Writing Emails Image Creation Creative Content Generation Titling Content Theme Generation Writing Blogs Writing eBooks Social Media Content Creation Website Content Derivative Content Creation Making Examples Visualization Mockups Technical Writing
		Content Management (Use Case)	Editing Summarizing Outlining Clarification/Simplification
		Information Management (Use Case)	Large Information Processing Research Searching through Local Files/Emails Validating Information
		Brainstorm (Use Case)	Idea Generation Help to Get to Start
		Operational Support (Use Case)	Assistance Automation Operational Routine Tasks Generating Meeting Notes
		Analysis (Use Case)	Sentiment Analysis

			Social Media Monitoring
		GenAI Adoption	Diffusion of Innovation Stages Hesitant Embrace
2	Benefits and Beneficial Aspects of GenAI in Marketing	Product Level	Quality Enhancement
		Personal Level	Saving Time Pace Productivity Efficiency Creativity Conversational Interface Empowerment Changes in Jobs
		Organizational Level	Economical Benefits (Getting More Work Done, Cutting Cust, Making More Money)
3	Risks and Challenging Aspects of GenAI in Marketing	Product Level	Incorrect Answer Irrelevant Answer Lengthy Answers Drop in Quality Hallucination Unrealistic Language (Generic Tone, Wrong Tone, Too Formal) Verification Process Technical Challenges Limited Tool Advancements Age of Data
		Personal Level	Overreliance Changes in Jobs
		Organizational Level	Reputational Risk Branding Risk

			Company Data Confidentiality
4	Ethics, Governance, and Regulation	Ethics and Values	Organizational Values Potential Solutions to Ethical Issues Ethical Considerations
		Governance and Regulation	Professional and Legal Standards Rules Disclaimer Guideline AI Council
5	Future of GenAI	Product Level	Expected Changes or Continuity Evolve Drop in Creativity Future Improvement
		Personal Level	Job Replacement Job Security Need for Human
		Organizational Level	Anticipated Changes in Marketing
6	Socio-Technical Systems	Socio-Technical Level	Tools Balance of Human Expertise with Technology Human Collaboration
		Organizational Level	Organizational Expectancy Regarding Usage Goals and Objectives Adjustments in Organizational Processes Structural Changes Decision-Making Learning Process and Support

		Environmental Level	Competitors
7	Task-Technology Fit	Task-Technology Fit	Task-Technology Fit Task Requirements Expectations from GenAI Tools
		Performance	Effects of GenAI on Performance and Outcomes Measurement of Outcomes and Effectiveness

Table 1. Table of themes, sub-themes, and codes.

12.3. Appendix C - Interview Questions for Validation

1. GenAI Usage:

Question: What do you use GenAI tools for?

Answer:

Finding:

1. Content Creation: GenAI aids in drafting and creating various content types, including emails, blog posts, website content, and social media updates. It also supports derivative content, creative work, and content management tasks such as editing and summarizing.
2. Information Management: GenAI helps in processing large volumes of data, conducting research, and validating information.
3. Brainstorming and Idea Generation: The tool is used to overcome writer's block and generate initial ideas, titles, and drafts.
4. Operational Support: GenAI automates routine tasks like generating meeting notes and other operational support activities, freeing up time for employees.
5. Sentiment Analysis and Social Media Monitoring: This technology automates the extraction of insights from social media, improving trend analysis and enabling better engagement with relevant content.

2. Benefits:

Question: What are the benefits of using GenAI for marketing communications tasks?

Answer:

Finding: Efficiency, pace, productivity, better performance, increased quality, creativity, economical benefits for organizations (with maximizing the work or doing the same amount of work with less people)

3. Challenges and Risks:

Question: What are the challenges when using GenAI for marketing communications?

Answer:

Finding: Hallucination, incorrect or irrelevant answers, generic or too formal tone, lack of storytelling abilities, technical issues, age of data used to train data, over-reliance

4. Creativity:

Question: How do you think GenAI affects creativity in marketing?

Answer:

Finding: Some people think it increases and some believe it decreases creativity. One finding is that this technology is redefining creativity. Many people now focus mainly on how to generate creative prompts rather than the piece of content itself.

5. Ethical Considerations:

Question: What are some ethical concerns regarding using GenAI in marketing?

Follow-up Question: Does your company have any ethical guidelines?

Answer:

Finding: Most companies prioritize brand protection and company data confidentiality over broader ethical responsibilities like user data privacy and societal impact. Most marketing professionals are not aware of the specific ethical considerations when they use AI.

6. Effects on Performance:

Question: How do you think GenAI affects your performance?

Answer:

Finding: It results in a higher level of performance, but there are no measurement tools or KPIs to actually see these performance changes.

7. Restructuring of Processes or Objectives:

Question: Has GenAI changed any structures, processes, or objectives in your company?

Answer:

Finding: GenAI has not changed any structures, processes, or objectives yet.

8. Training and Support:

Question: Does your company provide employees with support and training material about using GenAI in their work?
Answer:

Finding: Most companies support their employees during their learning process, but this learning material has areas of improvement. For example, they can include ethical aspects too. Ethical risks of using GenAI and their broader impacts in the society could be an important topic to consider.

9. Job Replacement:
Question: How do you see the future of GenAI?
Follow-up Question: Do you think it can replace humans?
Answer:

Finding: GenAI might displace some basic jobs, but it cannot entirely replace humans as there is a need for human collaboration and oversight in many areas.