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I won't become obsolete! exploring the acceptance and use of GenAI by marketing professionals

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Abstract

Purpose – Generative Artificial Intelligence (GenAI) is reshaping the marketing landscape by enhancing creativity, enabling personalised customer engagement, and streamlining operations. Its transformative impact on content creation opens new opportunities for marketing communication. This study examines how marketing professionals perceive its strategic value and investigates the psychological factors shaping their expectations and attitudes towards its adoption.

Design/methodology/approach – This study adopts a qualitative research approach, using semi-structured interviews with marketing professionals in the pharmaceutical sector to explore their expectations for GenAI adoption. The pharmaceutical industry's complex communication needs, strict regulatory requirements, and focus on innovation make it an ideal context for this investigation. Additionally, its underrepresentation in academic marketing research adds further relevance to the study.

Findings – Marketing experts do not view GenAI as an immediate threat. However, they are concerned about its long-term impact, particularly its potential to automate complex creative and strategic tasks, reducing the need for human involvement. The results emphasise the lasting importance of human creativity and sensibility, especially in pharmaceutical marketing, where effective communication relies on nuance and empathy. This study contributes to theory by incorporating psychological factors, such as the fear of obsolescence, into traditional technology adoption models, offering new insights into how GenAI can enhance rather than replace human creativity.

Originality/value – This study offers fresh insights into the adoption and implications of GenAI in marketing by focusing on the perspectives of industry professionals. Unlike prior research centred on technical advancements or consumer outcomes, this paper highlights the managerial viewpoint, exploring how GenAI enhances creativity, transforms content creation, and supports strategic goals in marketing communication. It also addresses key challenges, such as regulatory hurdles and the psychological impact of automation, providing a comprehensive understanding of how GenAI is poised to redefine marketing practices.

Keywords Generative artificial intelligence, Marketing communication, Innovation, Technology adoption

Paper type Research paper

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1. Introduction

The business landscape is undergoing a profound transformation driven by the widespread adoption of Generative Artificial Intelligence (GenAI). This branch of AI autonomously creates text, images, and audio, emulating human creativity (Oliinyk, 2023). Using extensive datasets, GenAI produces high-quality, novel content applicable to fields like natural language processing, creative design, and data synthesis. Scholars and practitioners view this surge in GenAI capabilities as a technological revolution reshaping creativity and innovation (Larsen and Narayan, 2023).

Within this dynamic context, companies are reimagining their strategies, cultivating new skills, and embracing GenAI to ensure survival and growth (Bahoo *et al*., 2023). Recent studies have analysed the adoption and impact of GenAI across various domains. Integrating AI technologies has significantly enhanced firms' innovation capabilities, driving changes in corporate strategies, operational efficiency, and competitive advantage, with notable transformations in business models and marketing approaches (Bahoo *et al*., 2023). In the retail and consumer goods sectors, GenAI has demonstrated its value in personalised marketing and innovative product design, creating tailored and engaging customer experiences (Cillo and Rubera, 2024). Islam *et al*. (2024) present the MARK-GEN framework, a structured method for applying GenAI in marketing to produce customised content, boosting engagement and brand visibility. Furthermore, GenAI is reshaping innovation management by enhancing information processing while reducing the risks and costs associated with traditional innovation processes (Haefner *et al*., 2021).

GenAI's rapid capacity to generate innovative content has driven its widespread adoption in marketing across various industries (Agrawal *et al.*, 2022). Its ability to produce visual, textual, and multimedia content offers transformative opportunities for corporate communication (Goodfellow *et al*., 2020). As a critical driver of marketing strategies, GenAI enables the creation of highly customised content tailored to consumer preferences, including personalised advertising and storytelling (Campbell *et al*., 2022; Vidrih and Mayahi, 2023). This influence is particularly evident in digital advertising, where GenAI transforms marketers' customer engagement (Baek, 2023). AI-powered technologies improve targeting and personalisation, allowing organisations to optimise engagement by delivering relevant content to the right audiences (Gao *et al*., 2023). Additionally, GenAI significantly enhances communication efficiency by reducing the time and costs associated with content creation (Pavlik, 2023; Cillo and Rubera, 2024).

Recent studies highlight GenAI's potential to enhance human creativity, significantly improving marketing effectiveness (Huang and Rust, 2022). Tasks once considered beyond automation, particularly creative processes in marketing, are now being transformed by tools like ChatGPT and similar GenAI models (Bull and Kharrufa, 2023). Kshetri *et al*. (2024) argues that GenAI enables professionals to focus on strategic, high-value activities by streamlining routine content generation. It also boosts organisational efficiency and engagement, offering considerable advantages (Cillo and Rubera, 2024). However, its widespread acceptance hinges on addressing critical challenges, including data privacy, content authenticity, and ethical concerns.

While much of the literature on GenAI has focused on its technical advancements and consumer impact, limited attention has been given to the behavioural intentions of marketing communication professionals in adopting and integrating this technology. Understanding their perceptions of value, attitudes toward use, and willingness to adopt GenAI is essential for recognising its transformative potential and implications for future business practices. As Kshetri *et al.* (2024) notes, strategic and ethical concerns are pivotal in shaping the managerial acceptance of GenAI, underscoring the need to analyse the factors that facilitate or hinder its integration into business environments. Furthermore, examining the acceptance and use of GenAI in business may offer valuable insights into its diverse impacts on creativity and content creation.

Therefore, this study seeks to fill this gap by investigating the factors that shape marketing professionals' attitudes toward adopting and using GenAI in marketing communication. It begins by examining their perceptions of the strategic value and utility of GenAI, framed by the following research question:

RQ1. How do marketing professionals perceive the strategic value of GenAI in marketing communication?

Existing literature has also primarily overlooked the psychological factors associated with using GenAI, particularly among marketing professionals, such as fear of obsolescence, and its influence on technology adoption. To assess technology adoption, research has extensively applied models such as the Technology Acceptance Model (TAM) by Davis (1989) and the Unified Theory of Acceptance and Use of Technology (UTAUT) and UTAUT2 by Venkatesh *et al*. (2003, 2012), although they do not adequately account for these psychological dimensions, which are critical when examining a disruptive technology like GenAI. This is especially true in marketing communication, where GenAI is expected to be disruptive in content creation. Therefore, this study seeks to investigate the following additional research question:

RQ2. What psychological factors shape marketing professionals' expectations and attitudes toward integrating Generative AI and to what extent do traditional technology acceptance models consider such aspects?

This study employs a qualitative analysis based on in-depth interviews with pharmaceutical marketing professionals to address the research questions following Gioia *et al*. (2013). A qualitative approach is particularly appropriate given the limited literature on the psychological factors influencing professionals' attitudes and willingness to adopt GenAI. This methodology allows for an in-depth exploration of complex, under-researched phenomena, offering rich, contextual insights into how professionals perceive and respond to this disruptive technology. By capturing nuanced perspectives, qualitative research is essential for defining the boundaries of this emerging field and providing a robust foundation for future studies and theoretical advancements.

The pharmaceutical sector was chosen for its highly regulated environment, reliance on precise communication, and a strong focus on innovation. These characteristics make it an ideal context for examining GenAI adoption in marketing communication and content creation. The sector's need for detailed, compliant messaging underscores GenAI's potential to streamline content development while meeting complex regulatory demands, offering valuable insights into its application in high-stakes communication settings.

While this study focuses on the pharmaceutical industry, its findings have broader relevance, particularly in marketing communication and content creation across diverse sectors. An essential contribution is developing an extended framework that builds on existing technology acceptance models, integrating psychological factors such as the fear of obsolescence alongside established dimensions. This model provides a deeper understanding of how professionals evaluate and adopt disruptive technologies like GenAI, specifically in the context of transforming content creation processes. It also lays a foundation for future research into GenAI's role in reshaping marketing communication practice.

2. Literature review

2.1 Models of technology adoption

To explore the adaptation and incorporation of emerging technologies into everyday activities across various contexts, several scholars provided theoretical foundations for technology adoption, offering theoretical models to understand the elements that influence the acceptance and use of technologies in different domains. Rogers, 1995 established the Diffusion of Innovations (DOI) theory, aiming to analyse the diffusion of new ideas and technologies, focusing on the factors influencing their distribution and speed (Rogers, 1995). The theory is known for its concepts of innovator categories and how an invention is disseminated within a social system over time through specific channels (Miller, 2015). Davis, in 1989, developed the Technology Acceptance Model (TAM), which has since become a standard framework for users' adoption of IT systems. The theory posits that a technology's simplicity and perceived usefulness are intrinsic factors that determine its acceptance and usage behaviour (Davis, 1989). In 2003,

Venkatesh *et al*. introduced the Unified Theory of Acceptance and Use of Technology (UTAUT), an advancement of earlier models, such as TAM, by integrating several components from previously developed models. Venkatesh *et al*. (2003) identified performance expectancy, effort expectancy, social influence, and facilitating conditions as crucial constructs that directly impact the adoption and utilisation of technology. Furthermore, as an expansion of the UTAUT initial model, Venkatesh *et al*. (2012) developed the UTAUT 2 model incorporating consumer market-relevant factors that impact the behavioural intention to adopt new technologies. UTAUT2 incorporates three additional constructs, namely hedonic motivation, price value, and habit, in addition to those previously included in the original UTAUT model. Specifically, the UTAUT2 constructs include: Performance expectancy (PE) that refers to an individual's belief in the extent to which employing technology will contribute to improving their job performance; Effort expectancy (EE) pertaining to the level of easiness in using the technology; Social influence (SI) that defines the extent to which an individual perceives that other influential individuals, such as peers or superiors, expect them to adopt the new technology; Facilitating Conditions (FC) denoting a person's perception of the existence of a technical and organisational infrastructure that facilitates the system's operation; Hedonic motivation (HM) that pertains to the enjoyment or delight obtained from utilising the technology; Price Value (PV) that refers to the cognitive balance between the perceived advantages of an application and the financial expense associated with its use; Habit (HT) that describe the degree to which individuals routinely execute behaviours as a result of acquiring knowledge.

While existing technology adoption models have provided valuable insights into the acceptance and use of various technologies (Yuan *et al*., 2015; Alalwan *et al*., 2017; Ramírez-Correa *et al*., 2019) focusing solely on either technology or psychological aspects, they may not fully capture the peculiarities associated with adopting advanced technologies like GenAI, especially when considering profound psychological aspects such as the prevalent fear of being replaced by AI systems. Existing technology adoption models typically prioritise practical factors like usability and utility. However, they may not adequately account for the intricate cognitive and emotional processes of embracing novel technologies such as GenAI. Concerns such as the existential fear of being obsolete or substituted may substantially impact the adoption process. These characteristics are essential for comprehending the resistance or reluctance to embrace advanced AI systems that have the potential to replace human roles in different areas.

2.2 GenAI in marketing communication

The marketing landscape is transforming significantly due to the widespread adoption and integration of GenAI. This technology drives creativity in content development and is expected to reshape organisational communication by enabling rapid, high-quality content production (Al Naqbi *et al*., 2024; Kshetri *et al*., 2024). GenAI, a subset of Artificial Intelligence (AI), holds unique attributes and uses despite their shared domain of computational technologies. While AI comprises technologies that possess the ability to perform activities that often need human-like intelligence, including acquiring knowledge, analysing information, and decision-making processes (Jiang *et al*., 2022), GenAI specifically focuses on generating new data, opening many opportunities for creating visual, textual, and multimedia content, widely utilised in creative domains and for data augmentation (Cooper, 2023). Furthermore, AI employs diverse machine learning models and techniques, such as deep learning, neural networks, and decision trees, to perform specific functions such as categorisation, forecasting, and evaluation (Yetilmezsoy *et al*., 2011). On the other hand, GenAI utilises neural networks that are specifically designed to generate new content. Examples in this field are Generative Adversarial Networks (GANs) and Variational Autoencoders (VAEs), which are specialised in acquiring knowledge from available data in order to generate authentic and realistic outputs (Epstein *et al*., 2023). Therefore, GenAI may represent a transformative force in marketing communication, offering unprecedented

opportunities for creativity, personalisation, and efficiency. However, only a few studies have already addressed this emerging topic. Prior researchers have examined the implementation of GenAI in marketing communication and its wider implications, which may be classified into three distinct areas of study: (1) the impact of GenAI on marketing, (2) the elements that improve its efficacy in adoption, and (3) the potential risks connected with its implementation. (1) One notable application of GenAI in marketing communication is the automation and improvement of content generation, encompassing both narrative and visual components since GenAI tools facilitate the development of persuasive textual, video, and visual content that effectively engages target audiences and attracts their interest (Goodfellow *et al*., 2020; Pavlik, 2023). GenAI's capacity to enhance content generation and tailor marketing strategies aligns with contemporary digital communication trends, allowing organisations to sustain a competitive advantage via rapid customisation and scalability (Kshetri *et al*., 2024). Furthermore, GenAI has empowered companies to produce distinctive, tailored content for various consumer segments, enhancing customer connections (Cillo and Rubera, 2024). According to Gao *et al*. (2023) AI-driven technologies, such as GenAI, improve the efficacy of advertising by allowing for hyper-targeted campaigns that adapt in real-time to consumer data. Moreover, GenAI facilitates the implementation of personalised marketing campaigns carefully designed to suit each consumer's unique preferences and behaviours, thus improving consumer engagement and satisfaction (Deng *et al*., 2019; Campbell *et al*., 2022; Oliinyk, 2023). GenAI's capabilities can also be employed to strengthen consumer relationships by enhancing consumer interactions via more effective communication strategies, such as real-time personalised storytelling and immersive experiences (Vidrih and Mayahi, 2023), playing an increasing role in digital advertising, that shapes how marketers interact with customers on digital channels, specifically via personalised advertising and AI-generated virtual influencers (Baek, 2023). Additionally, utilising GenAI may significantly enhance operational effectiveness, customer support, and product recommendations critical for sustaining a competitive advantage across diverse sectors (Lin and Ruan, 2023). (2) Several aspects may significantly improve the efficacy of implementing GenAI in marketing communication. GenAI may support and augment human input in a synergistic relationship established by integrating AI with human creativity instead of replacing human roles (Anantrasirichai and Bull, 2022). Huang and Rust (2022) suggested that GenAI has the potential to enhance human capacities in strategic planning and creative processes, leading to improved marketing effectiveness and innovation. GenAI can boost organisational innovation by supporting idea generation and expediting repetitive tasks, enabling marketers to focus on higher-value activities (Cillo and Rubera, 2024). Islam *et al*. (2024) further argue that frameworks like MARK-GEN enable more efficient integration of GenAI tools, enhancing the productivity of marketing teams and equipping them with new methods for engaging consumers. Such frameworks streamline GenAI implementation and facilitate marketing professionals to maximise personalisation and targeting accuracy in advertising campaigns (Gao *et al*., 2023). Additionally, Atlas (2023) underscore the role of GenAI in marketing education, suggesting that tools like ChatGPT can enable students to be better prepared for the evolving demands of the marketing industry. (3) Numerous risks associated with implementing GenAI in marketing communication may include privacy, ethical concerns, and market dynamics. Guaranteeing the ethical use of GenAI by preserving privacy and contextual integrity is essential for establishing trust and authenticity in AI-mediated interactions, which play a vital role in building consumer trust (Jain *et al*., 2023). Hence, the increasing integration of GenAI technologies into marketing communication may raise substantial concerns regarding violation of the ethical treatment of consumer data (Jain *et al*., 2023). Additionally, Cillo and Rubera (2024), underlining GenAI's potential disadvantages, found that GenAI's deficiencies in reasoning and correctness may lead to "hallucinations" (i.e. factually erroneous material). This constraint may present a difficulty for organisations in preserving brand authenticity, particularly if customers recognise AI-generated material lacking originality or significance (Cillo and Rubera, 2024). Tailored precision provided by AI-driven personalisation may pose

the risk of generating negative feedback or reinforcing consumer prejudices, therefore compromising brand reputation (Gao *et al*., 2023). Furthermore, the economic impact and market dynamics of GenAI can enhance market prosperity by reducing costs and increasing demand in creative areas. However, there is also a risk of affecting employment dynamics and market stability. Zhang *et al*. (2023), examining the economic ramifications of GenAI, with a particular focus on its influence on market dynamics and unemployment, found that, in contrast to the prevailing belief that it might cause economic recessions, the technology can encourage market prosperity through cost reduction and demand stimulation in creative sectors, including art production.

Therefore, Generative Artificial Intelligence (GenAI) has become prevalent across various areas of study, which presents intriguing dynamics driven by technological, individual, and societal factors. Hence, the principal objective of the present study is to explore the awareness and understanding of marketing experts regarding GenAI and to identify factors influencing their willingness to adopt GenAI in marketing communication.

3. Data and method

3.1 Research setting

To explore marketing experts' willingness to adopt GenAI, we focused on the pharmaceutical industry in Italy. This sector offers a uniquely challenging environment, defined by strict regulatory frameworks, the need for precise and compliant communication, and the complexity of managing large, sensitive data sets. (Morton and Kyle, 2011; Moalla *et al*., 2018; Cole-Heath and Sagiraju, 2024; Miozza *et al*., 2024). These characteristics make the pharmaceutical industry an ideal context for studying GenAI adoption, particularly its potential to optimise content creation while addressing the demanding marketing communication requirements in a highly regulated field.

Pharmaceutical marketing communication falls into three main categories: business-to-business (B2B), business-to-consumer (B2C), and business-to-government (B2G). While all three operate within regulatory frameworks, this study focuses on B2B and B2C communication, as they offer greater scope for creativity and innovation in engaging target audiences. In contrast, B2G interactions are more formal, institutional, and highly regulated, primarily focused on compliance with governmental requirements, public health policies, and procurement procedures. Additionally, B2G communication revolves around mandatory reporting, tender submissions, and legislative processes, which limits the use of emerging marketing technologies commonly applied in B2B and B2C contexts.

The primary users of B2B marketing communication within the pharmaceutical industry are healthcare professionals, including doctors, who serve as intermediaries connecting pharmaceutical companies with final consumers. This type of marketing communication aims to furnish comprehensive and technical details about pharmaceutical products that include safety profiles, information on drug efficacy, outcomes of clinical trials, and guidelines for usage to inform and educate healthcare professionals about the products. This form of marketing communication generally has fewer regulations than B2C, facilitating a more detailed exchange of information. B2C marketing communication is targeted at the final consumers, specifically the patients. This form of communication is heavily regulated to guarantee the accuracy, clarity, and absence of misleading information. These regulations aim to protect consumers by ensuring that pharmaceutical companies provide information that helps consumers make informed decisions about their health without being subjected to deceptive marketing practices. This sector's exploration is critical given its underrepresentation in existing marketing research and stringent regulatory requirements that significantly shape marketing communication practices. The pharmaceutical industry is recognised as one of the most research-intensive sectors, which requires continuous development and innovation, presenting ample opportunities for investigating the influence of research and development on market competitiveness and company strategy (Lakner *et al*., 2019). Furthermore, the sector is

characterised by its rapid innovation cycle, where new products constantly replace older ones, and effective marketing communication may play a critical role in ensuring that these innovations reach healthcare professionals and consumers efficiently and comprehensively (Pammolli *et al*., 2001; Vyas and Panesar, 2019).

The pharmaceutical industry's competitive nature and regulatory challenges make it a prime candidate for the benefits offered by GenAI, from data-driven decision-making to compliance with communication restrictions (Narula *et al*., 2021). GenAI may significantly impact pharmaceutical marketing communication by ensuring compliance with stringent regulatory frameworks, enhancing product lifecycle management, and improving patient engagement through personalised communication. These capabilities can be helpful for pharmaceutical marketing experts looking to maintain a competitive edge while adhering to the industry's regulatory demands. Adopting GenAI in the pharmaceutical sector could also lead to several transformative outcomes, such as automating routine tasks and allowing marketing professionals to dedicate more time to strategic and creative efforts.

3.2 Research design

The present study adopts a qualitative research approach to comprehensively understand the expectations held by marketing professionals involved in corporate communication activities regarding the acceptance and use of GenAI. When evaluating emerging technologies, previous technology adoption models may not sufficiently encompass the complexities of potential adopters' behaviour and the numerous variables that need to be considered. Therefore, a quantitative model cannot be implemented immediately due to the technology's novel nature; instead, a qualitative method can be adopted. This explorative approach is motivated by the necessity of assessing the readiness of this disruptive technology for marketing communication purposes. The depth of this understanding critically relies on how marketing professionals perceive the opportunities and challenges posed by GenAI and their inclination towards adopting GenAI for marketing communication. The primary data collection involved semi-structured interviews with a selected sample of marketing experts from pharmaceutical companies headquartered in Italy. While designed as semi-structured to provide a flexible framework of pre-defined themes, the interviews also allowed for in-depth exploration of participants' perceptions, motivations, and potential reservations regarding integrating GenAI into their marketing strategies (DiCicco-Bloom and Crabtree, 2006; Corbin and Strauss, 2014). To ensure a comprehensive exploration of the topic, we included open-ended questions (see Appendix) that investigate several domains, such as the perceived benefits and challenges of GenAI, the impact of regulatory environments, and the ethical considerations that influence decision-making processes in pharmaceutical marketing communication. This qualitative analysis provides a rich, contextual understanding of GenAI perceptions and the driving factors that bring its acceptance or resistance among marketing professionals in the pharmaceutical industry.

3.3 Data gathering

The data collection process took place between January and March 2024, involving in-depth interviews with 15 marketing professionals in the pharmaceutical sector. To ensure the consistency and validity of the findings, we selected only participants holding a substantial role in marketing communication activities. While some professionals carry additional responsibilities within their organisations (e.g. business directors), their primary function is closely aligned with marketing objectives. This criterion was pivotal in selecting participants to focus on individuals directly engaged in marketing communication. To understand the topic comprehensively, we included marketing professionals employed by pharmaceutical companies and those working within marketing communication agencies specialising in the pharmaceutical sector. This dual perspective allowed for a richer understanding of the perceptions surrounding GenAI in marketing communication, particularly regarding its long-

term impact on strategic communication, creativity, content personalisation, and operational efficiency.

Of the 15 participants, five are employed by major global pharmaceutical companies, with three of these firms ranked among the top 10 globally by market capitalisation as of 2024 (Mikulic, 2024). These companies, headquartered in the UK and the USA, operate within a highly regulated sector where marketing necessitates a careful balance between scientific accuracy and effective communication, making them particularly relevant for exploring GenAI's applications. While based in Italy, the other two companies are recognised leaders in the national market with substantial international reach.

The remaining 10 participants are professionals from Italy's top pharmaceutical marketing communications agencies, which specialise in navigating the sector's strict national regulations. Their exclusive focus on the Italian market offers valuable insights into how regulatory constraints shape creativity and strategic communication, providing a nuanced perspective on GenAI's role in this specialised field. These agency professionals were identified through a snowball sampling method initiated directly from our initial interviews with representatives of the major pharmaceutical companies. This referral process ensured the inclusion of highly regarded experts in the field with strong ties to the pharmaceutical sector. Each of these 10 participants plays an active role in the creative process within their organisations, regardless of their formal job titles. Their involvement in creative decision-making was a key selection criterion, as it allowed us to capture nuanced perspectives on how GenAI is perceived to impact creativity and strategic communication.

Our sample thus includes seasoned marketing professionals from corporate and marketing agency environments, providing a balanced view of GenAI adoption in the unique context of pharmaceutical marketing. This multi-faceted approach strengthens the study by highlighting diverse but complementary insights into GenAI's role in enhancing creative and operational efficiency across the industry.

Table 1 provides a detailed list of the 15 participants, each identified with an anonymised code (ID) to maintain the confidentiality and typology of their company. The table also includes information on the duration and scheduling of the interviews. The interview sessions ranged from one to nearly two hours, allowing for flexible, in-depth discussions covering all pertinent aspects of the research questions. This variability reflects our commitment to providing participants with the flexibility to fully articulate their perspectives. As noted by DiCicco-Bloom and Crabtree (2006), semi-structured in-depth interviews typically range from 30 min to several hours, depending on the depth of exploration required. Our priority was to ensure that even the shortest interviews allowed for a comprehensive discussion, enriching the dataset and deepening our understanding of the topic. Each participant was briefed on the study's objectives, with confidentiality assured, facilitating open and candid contributions. This thorough approach ensured the creation of a robust dataset, forming a solid foundation for subsequent analysis.

3.4 Data analysis

We applied the Gioia model (Gioia *et al*., 2013) for coding and analysis, following a qualitative inductive approach to develop grounded theory. The Gioia model provides a structured yet adaptable framework, using a two-stage coding process that balances rigour with flexibility to capture the depth of participants' insights (Costa *et al*., 2023).

The analysis began by identifying first-order codes that closely reflected the language and perspectives of the participants. This stage was essential to preserving the authenticity and richness of their experiences and ensuring that the coding remained as accurate as possible to the raw data. These first-order codes were then grouped into second-order themes, representing broader, researcher-interpreted concepts. This progression from descriptive to interpretive coding created a hierarchical structure, facilitating a deeper understanding of the data and leading to a robust, empirically grounded, and theoretically expansive framework.

Table 1. Interviews information

Company type	Country	Participant ID	Role of interviewee	Interview date	Interview duration (h = hours, ' = minutes)
Pharma company	US	ID01	Digital Director	05-feb-24	1 h 30′
Pharma company	UK	ID02	External Communications Lead	06-feb-24	1h 30′
Pharma Marketing Communication agency	Italy	ID03	Managing Partner Chief Medical and Strategy Officer	08-feb-24	1h
Pharma Marketing Communication agency	Italy	ID04	Head of Business Innovation and AI	08-feb-24	1 h 35′
Pharma company	Italy	ID05	Marketing Director	10-feb-24	1h
Pharma Marketing Communication agency	Italy	ID06	Founder and CEO	12-feb-24	2h
Pharma Marketing Communication agency	Italy	ID07	Creative Director	15-feb-24	1 h
Pharma Marketing Communication agency	Italy	ID08	Executive Creative Director and Innovation Lead	16-feb-24	1 h
Pharma Marketing Communication agency	Italy	ID09	Business Director	16-feb-24	1 h
Pharma Marketing Communication agency	Italy	ID10	Creative Director	20-feb-24	1h 30′
Pharma Marketing Communication agency	Italy	ID11	Science Communication and Public Engagement Director	21-feb-24	1 h 15
Pharma Marketing Communication agency	Italy	ID12	Head of Creative Strategy	01-mar-24	1 h
Pharma company	Italy	ID13	Business and Marketing Director	06-mar-24	1 h
Pharma Marketing Communication agency	Italy	ID14	Managing Partner and Board Member	12-mar-24	1h 15
Pharma company	US	ID15	Associate Director Marketing	28-mar-24	1 h

Source(s): Authors' own work

We used NVivo 14, a widely recognised qualitative data analysis software, to support this process. NVivo allowed us to maintain consistency in coding, efficiently track theme development, organise interview transcripts, assign codes, and systematically compare participant responses. The software's query tools enabled us to explore relationships among codes and identify patterns that informed the development of second-order themes. This structured coding process, supported by NVivo, aimed to build a comprehensive data structure that delineates the pathway from initial data to the final theoretical framework. This process provides a transparent foundation for the study's theoretical contributions, ensuring an in-depth understanding of marketing professionals' perspectives and aiding in developing a grounded theory that offers nuanced insights into the role of GenAI in the marketing context.

4. Findings

This section outlines the key findings from our analysis of interview transcripts with pharmaceutical industry marketing experts, along with additional collected materials. It identifies and discusses the main factors that shape GenAI's usage behaviours in content creation for marketing communication. Figure 1 visually represents the data structure, displaying all first-order concepts, second-order themes, and aggregate dimensions that emerged from our analysis using the Gioia model.

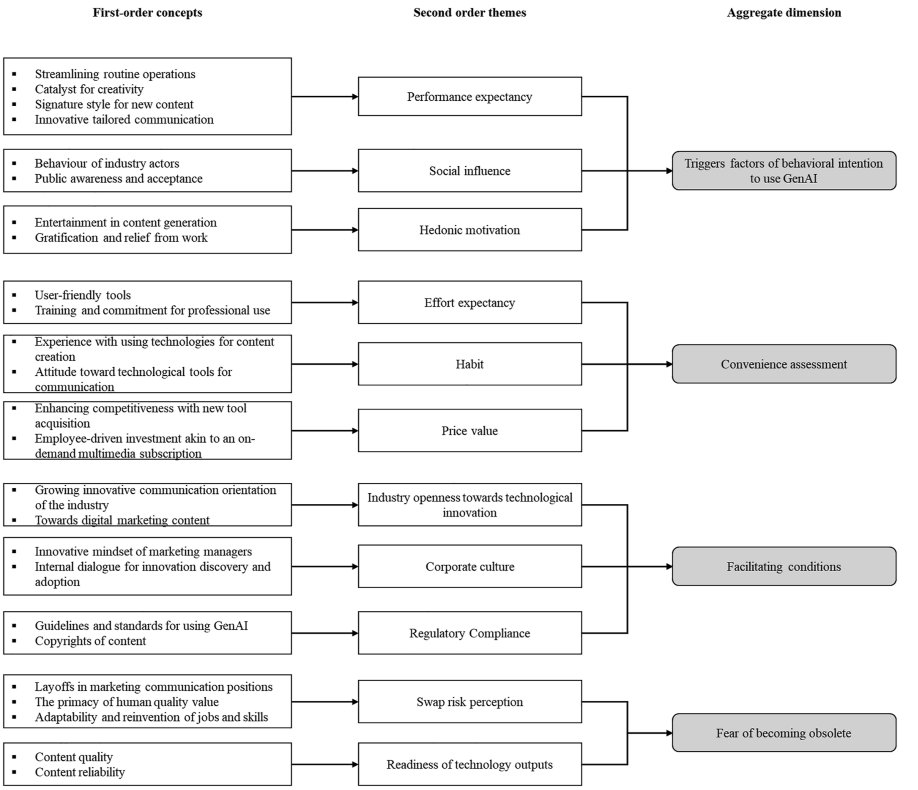

Figure 1. Data structure and codes. Source: Authors' own work

4.1 Triggers factors of behavioural intention to use GenAI

The interviewed marketing experts elucidate three primary factors underpinning their behavioural intention to use GenAI for content creation and communication purposes. Firstly, they harbour distinct performance expectations vis-à-vis this technology. A consensus among the interviewees underscores its burgeoning significance as a tool for tackling rudimentary and low-value-added tasks. GenAI streamlines the creation of layouts and photo editing that conventionally demand prolonged manual processing. The effectiveness of GenAI is further highlighted by its robust text-to-image transformation features and copywriting functionalities applications for crafting client draft proposals, compiling newsletters, and curating engaging social media content. GenAI exhibits promise in facilitating internal communication endeavours such as presentations and corporate meetings, where meticulous attention to detail may not be paramount. Furthermore, the experts posit that a critical advantage within the pharmaceutical industry lies in the simplification of sourcing scientific information and scrutinising clinical trials to articulate drug test findings precisely. Typically, these processes require significant time investment to generate accurate reports and develop effective communication content.

ID03 asserts, "At times, we spend hours just to locate that specific information regarding scientific tests and the effects of the drug or therapy that enables you to articulate the right content in communication."

Hence, GenAI emerges as a promising avenue to liberate marketing professionals from mundane tasks, enabling the team to concentrate on more strategic and creative endeavours

within marketing communication. The interviewees also assert that GenAI could catalyse creativity by generating unusual content and inspiring marketing teams during brainstorming sessions, providing new perspectives and ideas outside conventional thinking patterns.

ID10 asserts, "When you consistently engage in the same activities and focus on the same field, you tend to employ the same reasoning process. That is why I relate to GenAI almost as if it were a person, even though it is an algorithm. However, it seems to have its kind of imagination that can inspire me."

ID12 states, "Even though the idea of brainstorming with a machine seems strange to me, I feel intrigued by the idea of having an additional perspective that can be provided with a different mental framework from that of humans, influenced by the work set-up in a certain way."

Another performance expectation that surfaces from the interviews and drives the adoption of GenAI is the prospect of crafting innovative communication content.

ID09 argues, "We utilised GenAI with patients affected by schizophrenia, and it helped us to represent images starting from emotional states and specific words. Witnessing these representations come to life was incredible, transforming difficult-to-describe sensations into tangible images and effective content."

Furthermore, GenAI is anticipated to streamline the creation of personalised communication by identifying and automatically generating content tailored to the target audience, thereby enhancing the efficacy of marketing strategy and audience engagement. Specifically, GenAI is renowned for its distinctive style, which makes it appealing for targeted campaigns.

While the interviewees emphasise performance expectancy as the primary driver, social influence and hedonic motivation also emerge as significant factors influencing the intention to use GenAI. Communication agencies are singled out as trailblazers in introducing GenAI to the industry and instigating emulation behaviours of other actors in the industry. Furthermore, they are acknowledged for piquing their clients' curiosity by suggesting new content and campaigns rooted in GenAI. Social and cultural considerations also prove pivotal in the adoption of GenAI. The experts argue that the widespread public use of GenAI significantly streamlines its corporate adoption process.

ID14 claims, "If we consider past technologies like the metaverse or blockchain, nobody understood them. On the contrary, GenAI is a technology that has been immediately understandable since its launch. In just one year, everyone is talking about it, and many are using it, representing a driving factor for its adoption in business."

Some interviewees draw parallels between this cultural acceptance and the emergence and rapid dissemination of the Internet and social media. Indeed, when technological tools become ingrained in the culture, acceptance follows, thus facilitating broader industry-wide diffusion.

The experts have pointed out that we are currently experiencing a hedonic phase in using this new technology, with everyone somewhat attracted to this new tool. They observed a novelty effect in exploring and a willingness to test this technology, which enhances the behavioural intention of marketing experts to use GenAI.

ID09 claims, "The other day, a colleague and I had a blast during a brainstorming session. We consulted GenAI for feedback on the project's development and immersed ourselves in a moment of pure enjoyment. It was clear from the outset that this technology was full of surprises and could generate interesting, unpredictable, and creative insights."

GenAI generates fun and can alleviate the workload, providing a moment of positive distraction and a sense of gratification. However, some marketing experts assert that while GenAI is currently offering a novel, enjoyable approach, there is a concern that it may become tedious over time, similar to previous technologies, which could diminish the hedonic interest in using related tools.

ID02 asserts, "It was so enjoyable to run campaigns on Facebook. When social media first emerged, it was very cool but became boring. Five years ago, being a social media manager

was the coolest thing on earth; now, no one wants to do it anymore. I believe it is the cycle of technologies."

4.2 Assessing the convenience of GenAI adoption

All the interviewees stress the importance of evaluating the convenience of GenAI before adopting this technology for content creation in marketing communication. Initially, the behavioural intention to use GenAI appears to be influenced by the effort expectancy required to learn its features. In this context, accessibility and user-friendliness are considered pivotal. The marketing experts report that many software companies are prioritising the development of accessible and intuitive tools, thereby expediting the learning process. Moreover, they assert that marketing users prefer more intuitive tools, even if they are less powerful, rather than investing time in learning more complex software.

ID12 says, "It is like with Microsoft Excel: it is mighty, but often we only use it for simple calculations because it is more intuitive, ignoring its more advanced features."

However, the professional use of GenAI for content creation appears still complex and time-consuming. A comprehensive understanding of prompt input methods and best practices is necessary to achieve optimal results. The findings highlight the discrepancy between performance expectations and the efforts required to learn to use the tools professionally during the initial adoption stages, which can lead to frustrations. Notably, this learning process primarily refers to the learning curve faced by marketing professionals, focusing on usability and functionality rather than technical training from an IT perspective.

ID04 affirms, "In the beginning, it may seem enjoyable, but subsequently frustration sets in as one realises that to obtain the necessary answers, you must invest time in learning to utilise GenAI tools effectively, namely, to provide them with the correct inputs and obtain the expected outcomes."

Prior experience with technological tools and a favourable attitude towards integrating innovation into work practices influence the behavioural intention to use GenAI. These aspects deal with the "habit" dimension, emerging as factors in shaping the adoption of GenAI. All interviewed marketing experts affirm their familiarity with employing technological tools for everyday marketing communication tasks, especially for content creation. Hence, introducing GenAI tools resonates with their established habits and routines and is not perceived as a limit.

Finally, the convenience of adopting GenAI is also evaluated through investment assessment. The marketing experts express unanimous satisfaction with the price-value proposition of purchasing GenAI tools for their content creation activities.

ID02 asserts, "Companies need to make investments in GenAI today that may seem uneconomical at first glance but are essential for developing a certain positioning in the market."

Furthermore, experts emphasise that GenAI's cost mirrors that of on-demand multimedia subscriptions, augmenting its accessibility and uptake. This expense currently falls predominantly on professionals rather than companies, yet it is deemed manageable.

4.3 Internal and external facilitating conditions

The findings underscore critical facilitating conditions essential for encouraging the uptake of GenAI among marketing managers, art directors, and content creators. Interviewees unanimously agree on the evolving landscape within the pharmaceutical sector concerning communication strategies and content development. As digital communication becomes increasingly standard, especially within an industry historically reliant on traditional approaches, a notable opportunity arises for adopting GenAI.

ID15 says, "It is a personal perception, but it seems we are reaching a turning point in communication within the industry, especially with the advancement of GenAI."

Moreover, corporate culture emerges as pivotal in this arena. Marketing experts underscore that pharmaceutical companies are increasingly open to experimentation, even in

communication and marketing, as they recognise the significance of conveying messages in more effective and innovative ways to enhance competitiveness.

ID02 claims, "In a corporate environment devoid of innovation and an open-minded approach towards technological advancement, there is a risk of forfeiting the opportunity to remain competitive and effectively communicate in line with contemporary trends."

Interviewees concur that regulatory compliance poses a significant hurdle to the widespread adoption of GenAI. Given its unique characteristics, many assert the necessity of establishing precise regulations for GenAI usage in communication, particularly within the pharmaceutical sector. A notable concern revolves around content uniqueness and copyright issues. GenAI cannot guarantee the uniqueness of generated content, raising apprehensions among marketing managers regarding intellectual property rights. Most interviewees stress that the absence of well-defined national and international rules and standards hinders their inclination to utilise GenAI, at least in its current state.

ID05 argues, "One risk is using marketing content for which intellectual property ownership is unclear. Unfortunately, we have encountered several contractual impasses as no party was willing to assume responsibility for intellectual property. An error in this realm could potentially incur millions of euros in losses for the company."

4.4 Fear of becoming obsolete by marketing experts

The last aggregate dimension emerging from the analysis concerns marketing experts' fear of obsolescence due to GenAI adoption. Only a minority of the interviewed professionals anticipate an imminent impact on the labour force, foreseeing a decrease in the number of personnel involved in marketing and communication tasks due to GenAI. While acknowledging the potential for GenAI to replace human employees in mundane and repetitive tasks, the prevailing sentiment underscores the enduring importance of human creativity and qualitative value in communication and content generation.

ID07 asserts, "GenAI is perceived as the added value, but if it becomes ubiquitous, human critical and creative capacity will hold a privileged position."

ID08 claims, "I firmly believe that what is created manually and artisanally carries an invaluable value that deserves to be fully recognised. This is the same for communication content."

The findings underscore that GenAI is perceived as a tool only capable of responding to inputs, albeit without the capacity for sustained in-depth dialogue or meaningful discussion. GenAI falls short of replacing the human aptitude for fostering relationships and understanding the objectives of communication campaigns.

ID11 says, "There is significant value in debate, but currently, GenAI still has limited capacity to support an idea or a stance through the genuine exchange of creative opinions."

Furthermore, there is a pronounced imperative for refined content creation within the pharmaceutical industry. This arises from the realisation that communication transcends mere commercial endeavours; rather, it encompasses the pivotal responsibility of cultivating awareness and disseminating information regarding intricate health-related matters.

ID08 says, "The tone of voice is fundamental in our sector. It is not about shouting but conveying a message in a whispered and well-calibrated manner that GenAI cannot recognise".

According to the experts, GenAI's content often lacks the necessary depth regarding quality and reliability. The outputs tend to be disconnected from reality, rendering them impractical for adoption within pharmaceutical communication without requisite human oversight.

ID11 says, "GenAI may encounter challenges distinguishing between similar images, such as discerning ovarian tumour cells from normal cells, potentially leading to erroneous content generation. This underscores the imperative for human oversight to ensure the accuracy and reliability of the output."

Therefore, the need for human oversight in content creation further mitigates the fear of becoming obsolete.

ID10 argues, "It is a bit like riding a mechanical bull: sometimes it feels like you have found the rhythm, but then suddenly you are thrown off balance, and you realise you just cannot get what you want."

Finally, interviewees advocate the enduring importance of humans in the creative process. They contend that GenAI cannot offer substantive support, often generating banal and superficial ideas. Consequently, they are ready to embrace GenAI, viewing it as non-threatening. On the contrary, they perceive GenAI as a potential asset for integration into the skill sets of emerging communication professionals and creatives. The emergence of new hybrid professional roles with specialised abilities in prompt design is advocated. Experts regard this evolution as an opportunity for self-reinvention, akin to previous technological advancements.

ID05 claims, "GenAI will not render our roles obsolete; rather, it will propel us towards fresh work avenues and skills."

Table 2 summarises the key findings, organised according to the four aggregate dimensions of our framework, to offer a concise overview of the primary factors influencing GenAI adoption in marketing communication in the pharmaceutical sector.

5. Discussion

Contemporary marketing professionals face the challenge of embracing and leveraging GenAI to enhance communication strategies and content creation efficacy. This research undertakes a qualitative inquiry to explore critical aspects of GenAI adoption in marketing communication, examining how marketing professionals perceive the strategic value of GenAI (RQ1). Additionally, it investigates the psychological factors shaping their expectations and attitudes toward integrating this technology, evaluating the extent to which traditional technology acceptance models account for adopting disruptive technologies like GenAI (RQ2). Drawing upon insights from the pharmaceutical industry and established theoretical models concerning technology adoption, we define a conceptual framework delineating the interconnections among various factors influencing the behavioural intention to use GenAI (see Figure 2).

According to the data structure, the framework delineates four dimensions of factors influencing the behavioural intention of marketing professionals: triggers, convenience, facilitating conditions and fear of becoming obsolete. Consistent with recent research (Huang and Rust, 2022; Lin and Ruan, 2023; Al Naqbi *et al*., 2024), the findings concur that GenAI is poised to reshape the communication landscape by enhancing content creation and marketing communication activities. It is anticipated to unlock opportunities for generating novel and innovative visual, textual, and multimedia content, offering unprecedented avenues for personalisation and efficiency. In line with Cillo and Rubera (2024), this transformation allows for more personalised and efficient communication, marking GenAI as a tool that enhances creative output and alters consumer engagement and content personalisation processes. Our analysis posits that marketing professionals are inclined to embrace GenAI because they believe it can augment and extend their capabilities in content creation and inspire creative processes, consequently enhancing marketing communication effectiveness. These findings corroborate the emerging body of literature (Goodfellow *et al*., 2020; Campbell *et al*., 2022; Pavlik, 2023; Vidrih and Mayahi, 2023) by affirming that GenAI can produce content that significantly captures the attention of customers and stakeholders by crafting narrative and promotional communication content, including immersive experiences and real-time personalised storytelling, based on specific consumer preferences. Therefore, marketing professionals' behavioural intention is driven by the prospect of leveraging GenAI to enhance their performance, particularly in introducing innovative forms of marketing communication that are more engaging and entertaining. We find further confirmation of Islam *et al*. (2024) findings, observing that GenAI tools facilitate the efficient scaling of creative content, thereby assisting marketing professionals in maintaining their competitiveness in the rapidly evolving digital landscape.

Table 2. Key findings of interviews with marketing professionals

Aggregate dimension	Key findings
Triggers for Behavioural Intention to Use GenAI	Marketing professionals identify several factors driving their intention to use GenAI in content creation. Key performance expectations include its ability to handle repetitive tasks, streamline content creation (e.g. layouts, photo editing, and copywriting), and enhance internal communication. GenAI also facilitates creativity, inspires new ideas during brainstorming sessions, and enables personalised communication tailored to target audiences. Social influence and cultural acceptance further encourage adoption, as the widespread use of GenAI fosters industry emulation. Additionally, a hedonic motivation tied to the novelty and enjoyment of using GenAI enhances the appeal of this technology, although some warn that this effect may diminish over time.
Convenience Assessment	Marketing professionals stress the need to evaluate the convenience of adopting GenAI for content creation. Effort expectancy is crucial, with usability and ease of learning influencing adoption. Although GenAI is powerful, the initial learning curve, particularly in mastering prompt input, can lead to frustration when expectations don't align with the required effort. Habit is also significant, as professionals are accustomed to using technology for everyday marketing tasks. This familiarity means that adopting GenAI feels natural and aligns with existing routines, minimising resistance to integration and enhancing the likelihood of adoption. Lastly, price value is positively viewed. Professionals see GenAI's cost comparable to on-demand multimedia subscriptions, a manageable investment essential for maintaining market positioning.
Facilitating conditions	Marketing professionals highlight several key facilitating conditions influencing the adoption of GenAI in the pharmaceutical sector. The evolving digital communication landscape offers a substantial opportunity for GenAI as the sector shifts from traditional to more digital-focused communication strategies. Many see this as a turning point that encourages adoption. Corporate culture is also crucial: pharmaceutical companies are increasingly open to experimentation in marketing, recognising that innovative communication is essential for competitiveness. However, regulatory compliance remains a significant challenge. The lack of clear regulations on GenAI-generated content, especially regarding intellectual property and copyright, poses risks and limits its wider adoption. Interviewees express concerns over potential legal and financial implications, stressing the need for well-defined national and international guidelines to support GenAI's responsible use.
Fear of becoming obsolete	Marketing professionals express mixed feelings about the potential impact of GenAI on job security. While some foresee reducing roles tied to repetitive tasks, most believe that human creativity and nuanced understanding remain irreplaceable. Human oversight is essential, especially in the pharmaceutical sector, where communication often requires a carefully calibrated tone and deep comprehension of health-related complexities. GenAI is perceived as lacking the depth for high-stakes content creation, reinforcing the need for human involvement. Professionals also emphasise that GenAI's limitations in sustaining in-depth dialogue and understanding campaign objectives mean it cannot replace the relational aspects of marketing communication. Consequently, GenAI is seen as an asset that complements human creativity rather than threatening their roles. Experts advocate for new hybrid roles, seeing GenAI as a catalyst for skills development, particularly in areas like prompt engineering, that allow professionals to blend technical and creative expertise.

Source(s): Authors' own work

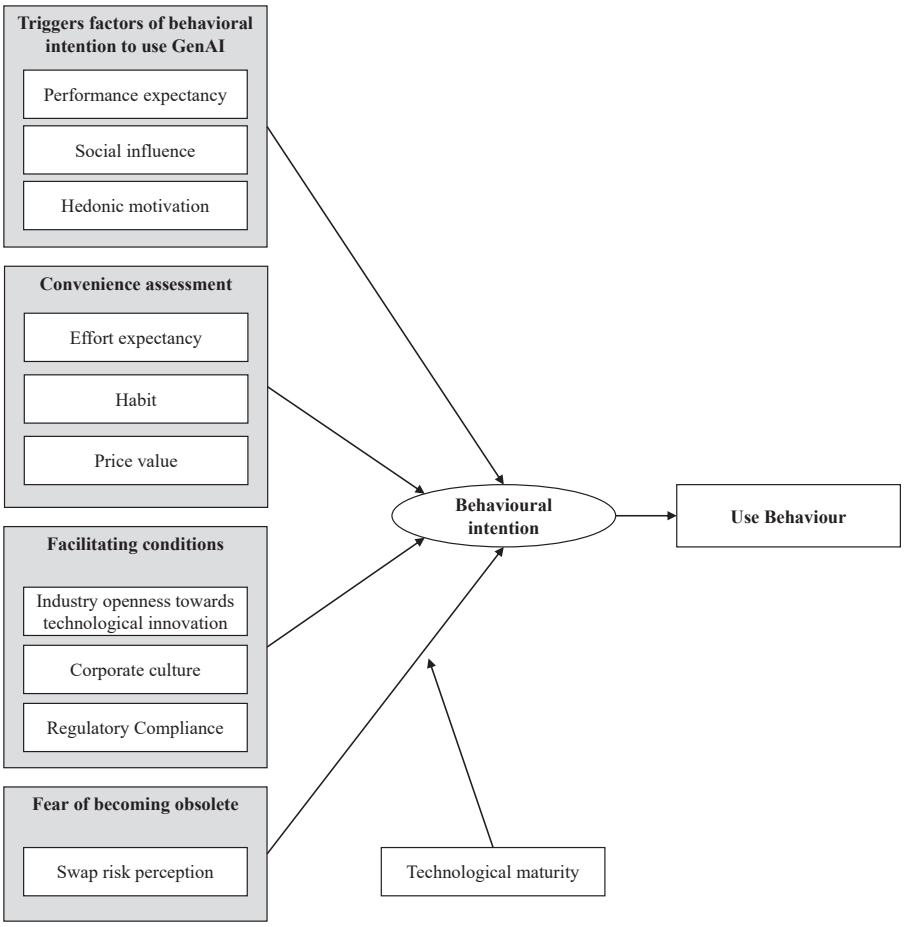

Figure 2. A theoretical model of GenAI's acceptance and use for marketing communication. Source: Authors' own work

Among trigger factors, the framework encompasses social influence and hedonic motivation. This aligns with the UTAUT2 model proposed by Venkatesh *et al*. (2012). Indeed, marketing experts acknowledge that they are influenced by the actions of competitors and partners when adopting GenAI-related tools in communication activities, motivated by the imperative to stay abreast of market trends and maintain competitiveness. Additionally, public opinion is a significant catalyst, with widespread interest in AI accelerating corporate adoption of these technologies (Kshetri *et al.*, 2024). While hedonic motivation does not emerge as a primary trigger, most interviewees concur that it can evoke curiosity regarding entertainment possibilities during work. The allure lies in the prospect of integrating GenAI into routine marketing activities, providing a moment of respite and gratification.

The behavioural intention to adopt GenAI in marketing communication is also positively influenced by the second aggregate dimension of factors that deal with convenience assessment. Despite the effort expectancy regarding the time and energy required to learn GenAI for content creation not being deemed paramount, experts assert that GenAI-related tools are generally user-friendly. Indeed, software houses are increasingly inclined to offer easily implementable tools to bolster sales and meet demand. While interviewees demonstrate

familiarity with technology and a strong inclination towards adopting innovative tools for content creation, the findings support the necessity for specific training courses to use these new tools proficiently, akin to other technological tools. Alongside considerations of price value, marketing professionals meticulously assess this aspect before investing in GenAI, altering their behaviour intention. Despite GenAI's performance not being of paramount concern, the investment is universally perceived as valuable, positively impacting the decision to adopt GenAI for marketing communication purposes.

The third dimension outlined in the framework pertains to facilitating conditions. Experts argue that communication, particularly within the pharmaceutical industry, is undergoing significant transformations due to a broader inclination of company marketing managers towards embracing new technologies and innovative content to engage their target audience. Regulatory bodies are slowly adjusting to the digital landscape, which could further facilitate GenAI's integration into heavily regulated industries (Kshetri *et al.*, 2024). Regulatory adjustments to accommodate GenAI may enhance its adoption, and reducing constraints could encourage GenAI's broader integration in businesses where compliance is critical (Cillo and Rubera, 2024). Gao *et al*. (2023) underscore that as AI technologies advance in complexity, legal frameworks should adapt to address the ethical and practical difficulties they provide. Communication agencies advocate for innovative content generated with specific tools, including GenAI, in this context. Consequently, GenAI is perceived as valuable for effectively addressing these changes, positively influencing the behavioural intention of marketing professionals to utilise it for content creation and communication objectives. However, the findings highlight that regulatory complexity represents a tangible obstacle. Clear guidelines and validation from national and international authorities regarding appropriate libraries of words and prompts are necessary to facilitate the adoption of GenAI for marketing communication in the pharmaceutical industry. As Jain *et al*. (2023) noted, this technology disrupts established norms concerning privacy and context in communication. Therefore, if regulations are not adapted to the evolution of this technology, it could impede the behavioural intention of marketing professionals to use GenAI in their content creation activities.

The proposed conceptual framework introduces a fourth aggregate dimension that remains unexplored in the existing academic literature concerning the adoption of GenAI. The fear of becoming obsolete, rooted in the psychological domain, can negatively impact professionals' willingness to adopt such technology for marketing communication. This fear reflects broader ethical considerations about job security and the social impact of AI. While GenAI can improve operational efficiency, it also raises concerns about workforce displacement and the ethical responsibility of organisations to support employees in adapting to technological advancements. Despite GenAI's significant potential for displacing human labour, interviewees uniformly assert their lack of apprehension regarding obsolescence. This confidence primarily arises from the technology's perceived maturity, a mitigating factor in our framework. GenAI is acknowledged to be encumbered by substantial limitations. Its dependence on human input and oversight persists, requiring an ongoing mediation and dialogue between humans and GenAI for effective operation, as it cannot perform effectively autonomously. Furthermore, marketing communication is still perceived as a field that necessitates the amalgamation of various skills and adaptability to diverse audiences, rendering it complex to rely exclusively on GenAI for automated content generation. This is consistent with the findings of Anantrasirichai and Bull (2022), who suggest that the most significant advantage of GenAI is observed when it complements rather than replaces human creativity. Organisations adopting GenAI may thus prioritise training and upskilling initiatives, ensuring employees are prepared for new hybrid roles integrating GenAI tools. This approach may address ethical concerns about job displacement and leverage GenAI to enhance rather than replace human creativity.

The findings underscore the limitations of GenAI in terms of creativity, emphasising the technology's current low maturity level. This aspect significantly reduces the perceived threat GenAI poses, considering the crucial role of creativity in content creation and marketing

communication. The marketing professionals emphasise the absence of genuine creative output from GenAI because it shortens practical support, often offering commonplace and superficial ideas that require substantial refinement for meaningful development. This perspective confirms Gao *et al*. (2023), noting that while GenAI can enhance targeting and personalisation in advertising, it cannot independently replicate the creativity required in many campaigns. The findings indicate that marketing professionals perceive themselves as indispensable in achieving exceptional results and creative breakthroughs, feeling irreplaceable by GenAI. For instance, GenAI lacks the autonomy to independently generate ideas by analysing a marketing brief, highlighting the predominant role of humans in the creative process. This aligns with Cillo and Rubera (2024), arguing that GenAI's most significant value lies in augmenting human creativity by inspiring new approaches rather than independently generating original content. Interpreting a brief and conceiving original and relevant ideas demand specific skills, mainly due to the necessary interaction between individuals to grasp marketing objectives and underlying customer needs. A creative mind can simultaneously assimilate multiple information streams, generating innovative ideas and communication content. This aligns with Kshetri *et al*. (2024) findings that GenAI tools are most effective in enhancing human creativity by providing new perspectives rather than autonomously driving creative projects. Therefore, creativity remains within the exclusive domain of humans, reducing concerns about being replaced by GenAI and thus fostering the behavioural intention of marketing managers to adopt it.

6. Conclusion

6.1 Theoretical contribution

The paper enhances the academic discourse on technology adoption models by proposing integrations and revisions to examine the adoption and use of GenAI in the marketing communication domain. While existing literature offers valuable insights into the acceptance and use of various technologies, they may not fully capture the complexities associated with adopting a disruptive technology like GenAI. This is particularly noteworthy when considering psychological factors, like the fear of becoming obsolete caused by GenAI. The distinct features of this technology, particularly its ability to automatically generate content, raise questions about the future roles of professionals in marketing communication. Therefore, comprehending the factors underlying the reluctance or willingness of marketing professionals to adopt advanced GenAI tools is crucial for exploring the adoption model theoretically.

The study draws upon Venkatesh *et al*.'s (2012) UTAUT2 model. It performs a qualitative analysis in the pharmaceutical industry and identifies the factors influencing marketing professionals' behavioural intention to use GenAI in content creation and communication.

The proposed framework presents a refinement of the UTAUT2 model tailored for adopting GenAI among professionals. It outlines four aggregate dimensions of constructs, interconnected by their influence on behavioural intention and pivotal role within professionals' decision-making processes. The triggers dimension encompasses the constructs "performance expectancy," "social influence," and "hedonic motivation" drawn from the UTAUT2 model. These elements strengthen the inclination towards utilising GenAI within professional settings, highlighting the multifaceted drivers behind the behavioural intention. The convenience dimension integrates the constructs "effort expectancy", "habit", and "price-value", previously recognised within UTAUT2. These components reaffirm their positive impact on marketing professionals' decision-making processes, underscoring the importance of user convenience and perceived value in adoption decisions. A distinctive departure from UTAUT2 lies in treating "facilitating conditions" as an aggregate dimension, synthesising pertinent constructs that warrant individual consideration. Notably, the study underscores the significance of industry receptivity to technological innovation and corporate culture as pivotal factors influencing the adoption of disruptive technologies like GenAI.

Moreover, regulatory compliance emerges as a critical determinant, necessitating delineating ethical and practical guidelines to navigate emergent challenges and propel adoption trajectories forward. The study's findings underscore the need for clear ethical and practical guidelines as essential facilitating conditions for adopting GenAI in marketing communication. While previous literature broadly acknowledges regulatory compliance's importance, our research specifies the practical implications of these guidelines for GenAI, including intellectual property rights, data privacy, and transparency (Lin and Ruan, 2023).

The main distinction from the UTAUT2 lies in integrating a novel aggregate construct, namely the "fear of becoming obsolete", one of this study's most distinctive contributions. Unlike previous models that focus mainly on practical factors like usability, performance expectancy, and effort expectancy (Venkatesh *et al*., 2012), our findings highlight the significant role that psychological factors—specifically, concerns about job displacement—play in GenAI adoption (Figure 2). This dimension introduces a new understanding of behavioural intentions critical in the context of a disruptive, autonomous technology like GenAI, which can potentially replace specific human roles in creative and content generation fields. This construct encompasses the apprehension regarding the risk associated with adopting GenAI, which is a significant consideration from our analysis and warrants attention. Beyond merely assisting marketing professionals in routine tasks, the advantages offered by GenAI are expected to expand exponentially. Thus, the theoretical model must account for this psychological dimension to comprehensively understand professionals' behavioural intentions towards GenAI adoption. Indeed, marketing professionals may perceive a threat and exhibit resistance, which could impede the acceptance and utilisation of GenAI at the organisational level. These concerns, not presently addressed in the UTAUT2 model, are crucial. The fear of becoming obsolete is anticipated to influence behavioural intention, particularly as GenAI matures technologically adversely. This construct is a moderating factor within the model, implying that lower technological maturity correlates with decreased fear of obsolescence among marketing professionals and, subsequently, diminished willingness to adopt GenAI for marketing communication purposes. This perspective is reinforced by the insights gathered from interviews, indicating that while GenAI is not currently perceived as a significant threat, there is an anticipation of heightened risk in the future. Consequently, professionals may exhibit reduced inclination towards adopting this technology as its maturity progresses and potentially jeopardises their roles. This underscores the importance of including this construct in the analysis.

Our study's framework represents an innovative theoretical contribution, as it offers a versatile model that can guide future research and practical applications in similar technological contexts.

6.2 Managerial implications

The paper provides valuable managerial implications, indicating that adopting GenAI in marketing communication holds significant promise. Consequently, companies and communication agencies are expected to increasingly invest in this technology to remain competitive and support the activities of marketing managers and professionals. This indicates that marketing managers are willing to integrate GenAI into their activities because their performance expectations outweigh their efforts, particularly their fear of becoming obsolete.

However, some drawbacks may arise from using GenAI at the current stage. The quality and reliability of content generated by GenAI are insufficient for automatic use in marketing purposes; it still requires human supervision. GenAI cannot fully comprehend communication needs and cannot generate creative ideas to meet marketing objectives. Additionally, the findings highlight the risk of dispersion among marketing professionals and time loss associated with the wide range of available options. The abundance of choices can often impede decision-making as one strives for perfection amidst immediately accessible tools. Moreover, the hedonic motivation associated with adopting GenAI is closely linked to

generational aspects. GenAI has emerged in a context where younger, more technology-oriented generations find it rewarding and enjoyable. While some may find it helpful, others may perceive it as entertaining.

Regarding the future of communication agencies, the findings support the perspective that corporations will likely continue to require their services despite the potential of GenAI because they still need guidance on which content to generate, where to generate it, and why to use it. Therefore, marketing professionals working in communication agencies are not intimidated by this technology because their role will evolve but remain crucial. They may need to invest in acquiring new skills specifically to utilise GenAI tools. The findings underscore the substantial requirement for continuous training and development initiatives targeted at marketing teams. These initiatives should encompass communication agencies and companies, facilitating their proficiency in adopting and utilising novel Gen-AI tools. Managers must allocate resources towards educational endeavours to foster internal content creation and marketing communication competencies. Such investments should emphasise not only understanding the capabilities of GenAI but also its ethical considerations and limitations. By doing so, professionals engaged in communication will be empowered to collaborate adeptly and innovatively with GenAI tools. Although GenAI may not immediately threaten marketing employment, proactive managers should anticipate forthcoming shifts in workforce dynamics and skill demands. Crafting strategies to address these changes, such as implementing reskilling initiatives or training programs, is crucial for ensuring organisational resilience in the face of technological evolution. By proactively addressing these managerial implications, marketing leaders can effectively guide their teams through the challenges and opportunities presented by GenAI, fostering a culture of innovation, efficiency, and ethical responsibility within their marketing practices.

Moreover, the study emphasises that we live in an era of communication explosion, where every sector heavily relies on communication. Even as GenAI becomes a standard tool, there will still be ample room for agencies and their creativity, given the extensive volume and variety of communication-related tasks required by companies.

In the current scenario, marketing professionals appear willing to implement GenAI. They are eager to witness improvements in its quality, even in supporting their creative processes, as they do not perceive it as a threat. Indeed, the role of humans in the content creation process remains predominant because GenAI is viewed as merely an assistant that must be guided through the correct prompts. Indeed, the contribution of GenAI appears restricted to specific tasks, and the creativity required for content creation in marketing communication remains a human affair. GenAI lacks the intuitive understanding and creative capacity inherent to human cognition. As such, marketing professionals play a central role in conceptualising, designing, and executing creative campaigns that resonate with audiences. Therefore, while GenAI may serve as a valuable tool in the marketing toolkit, it does not replace the essential role of human creativity in crafting compelling and impactful communication.

However, an organisational concern that may pose a considerable barrier to implementing GenAI technology is the ambiguity surrounding property rights. This fear is not based on psychological considerations but on concrete organisational worries over legal and proprietary difficulties. Due to the ambiguous status of property rights regarding both the training data utilised by GenAI models and the outputs they produce, organisations are hesitant to deploy GenAI technology since, despite the payment for property rights to the utilised data, the ultimate ownership of the rights to the outputs generated by AI, remains unknown. This ambiguity may bring legal problems in which corporations may be considered responsible for copyright infringement. Hence, these prospective legal challenges may significantly impede the adoption of GenAI technologies, which could result in substantial financial and reputational harm to businesses. This fear appears organisational due to its impact on businesses at a strategic level, thereby influencing choices related to the incorporation of technology, strategies for innovation, and the management of risks (The Economist, 2024).

6.3 Limitations and future studies

While the results provide valuable insights into the attitudes of marketing communication experts regarding GenAI adoption, offering an understanding of the delicate balance they seek between embracing technological innovation and preserving the distinct value of human creativity and strategic thinking in marketing communication, the paper does have some limitations. First, concerning the study results' generalisability, the pharmaceutical sector's applicability may be limited due to this industry's unique characteristics and regulatory environment. Against the generalizability of the findings, the pharmaceutical industry has more regulation and control over marketing communication. Hence, the fears and other psychological concerns expressed by marketers in this industry may be less severe in different industries where marketing communication is more flexible. GenAI is a disruptive, general-purpose technology, making the findings of this study broadly applicable to other technologies with comparable characteristics. Future research could include comparative studies across retail, financial services, entertainment and healthcare sectors to improve the generalizability. Investigating the role of GenAI in marketing communication within these industries would offer a broader perspective on marketing professionals' attitudes towards its applications and associated challenges. Second, although the research conducted in the pharmaceutical industry has the potential to be applicable in numerous international contexts for its significant globalisation characteristics, the present study's focus on the Italian context may limit the generalizability of results to different institutional settings. Therefore, future research should expand the scope of the study by conducting comparative investigations across multiple countries or regions. Third, employing an exploratory qualitative methodology, the study presents certain limitations concerning the depth and scope of the analysis. Hence, future research should employ quantitative methodologies that utilise construct-specific scales. Moreover, thorough research, especially addressing the "fear of becoming obsolete" dimension, would be beneficial in the following stage. Along with differences among demographic groups like age and professional experience, the study might contain focused questions evaluating psychological elements, including job security issues, anxiety levels, and openness to technology. More generalisability and statistical analysis for determining the frequency of these anxieties and their influence on GenAI adoption would also allow a more significant, cross-industry sample. This study might employ mixed methods to balance quantitative insights with in-depth qualitative interviews, offering a richer understanding of how perceived job displacement affects professionals' intentions to adopt GenAI. Finally, future research should consider a combined qualitative and quantitative approach, expanding the scope to diverse industries and geographical regions for a more comprehensive understanding of GenAI adoption in marketing communication.

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Appendix
Interview protocol

Section 1: Participant Profile and Industry Experience

(1) What is your role in the organization, and what are your primary responsibilities related to marketing communication?

(2) How long have you been working in the pharmaceutical industry?

(3) What are the unique characteristics of marketing strategies within the pharmaceutical industry, specifically in terms of communication?

Section 2: Technology Adoption and GenAI Familiarity

(4) Does your company's marketing and communication department use technologies routinely?

(5) Are you familiar with GenAI (GenAI), and does your company currently employ it in its marketing communication activities?

(6) Are you planning to incorporate (or further develop) GenAI in your company's marketing and advertising activities?

Section 3: Perceived and Expected Benefits

(7) What benefits and advantages do you expect from implementing GenAI compared to existing marketing communication methods?

(8) What are the primary changes that will occur?

Section 4: Implementation Challenges and Organisational Dynamics

(9) Can the learning process of using GenAI in marketing communication activities be complicated?

(10) What aspects could either support or impede the integration of GenAI in marketing communication activities within the pharmaceutical industry?

(11) Do you expect any particular company-level factors that might influence adopting this approach?

(12) Is the quality-to-price ratio achieved through acquiring and utilising GenAI for marketing purposes satisfactory?

(13) Might the implementation of GenAI by rivals or strategic partners inspire a greater propensity within your organisation to employ this new technology?

Section 5: Psychological Impact and Professional Adaptation

(14) Do you believe that incorporating GenAI may enhance the enjoyment and productivity of your staff and yourself?

(15) Do you believe that GenAI has the potential to become a threat to your job or that of your staff?

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