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#### The AI paradox in marketing: Fascination, resistance, and reinvention

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#### ABSTRACT

Grounded in the Technology Acceptance Model (TAM), this research explores how marketing professionals perceive AI adoption, examining the paradoxical tensions between technological fascination and professional resistance that challenge traditional TAM assumptions. This study draws on an exploratory qualitative approach involving 24 international marketing professionals (with 3-30 years of experience) from Africa, Europe, the United States, and the Gulf region. Data was collected through semi-structured interviews, using purposive sampling, and continued until theoretical saturation was achieved. Data analysis is based on a thematic content analysis method. Our analysis reveals three paradoxical perceptions (favorable, unfavorable, ambivalent) and identifies a novel five-category benefit taxonomy (technological, organizational, psychological, economic, communicational) alongside six barrier categories, challenging the linear adoption models prevalent in existing literature. The results show that professionals perceive AI primarily as a complementary tool that improves their individual performance while fundamentally transforming their profession. Theoretically, this study extends TAM by incorporating professional resistance and paradoxical adoption patterns, highlighting the limitations of linear acceptance models when applied to AI adoption within creative professional contexts. The study identifies the marketing experts' perspectives on the future of their profession, the areas with high potential for AI impact, as well as the skills needed to remain relevant in the face of increasing integration of this technology. Practically, our findings provide a framework for managing AI adoption resistance in emerging markets and guidelines for organizations navigating the AI transformation paradox. Managerial implications are formulated to guide marketing professionals in the investment and use of AI, integrating it consistently into their daily practice.

#### 1. Introduction

Artificial intelligence (AI) has been booming in recent years than ever before, driven by innovative technological advances (Alharbi et al., 2025). Today's businesses have gone beyond the experimental stage and are investing heavily in AI, placing it at the heart of present concerns, which embrace open innovation (Pitakaso et al., 2025). According to Gréselle-Zaïbet and Dejoux (2023), AI is gradually being integrated into all sectors of activity, even influencing the daily lives of organizations and their employees. This can be explained by several factors, such as

the development of algorithms, access to huge volumes of data and increasing computing power. According to a study conducted in 2023 by McKinsey and Company (2023), 80 % of companies plan to integrate AI into their marketing strategies by 2025. The global market for AI in marketing is estimated to reach \$4 0 billion by 2025, with annual growth of 29 %, highlighting the significant opportunities for companies investing in this technology.

Nowadays, AI has become a major pillar of marketing, requiring not only suitable tools, but also a new strategic vision and renewed mentalities for any type of businesses (Enshassi et al., 2025). AI influences

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various sectors, including marketing, with significant transformations in trades (Chintalapati and Pandey, 2022; Enshassi et al., 2025; Corvello, 2025). This technology is revolutionizing the way businesses interact with consumers, positively impacting the personalization of customer experiences, automating repetitive tasks and profoundly change the professional landscape of marketing practitioners who must reconcile the opportunities offered by emerging technologies with the need to preserve their professional identity. (Dwivedi et al., 2021). However, there are concerns about the intensive use of AI. Particularly in terms of privacy protection, dependence on algorithms and other ethical issues requiring increased vigilance (Gréselle-Zaïbet and Dejoux, 2023). Digital transformation not only changes the way businesses interact with consumers, but also redefines the marketing decision-making process, enabling more precise targeting and deep, innovative personalization of customer interaction.

Recent advances in generative artificial intelligence (such as ChatGPT, Gemini and DALL·E) have opened up new opportunities for innovation and development, while also raising concerns about the relevance of professions and the authenticity of creative work (Lim et al., 2023). According to a recent survey conducted by McKinsey (2023), which was answered by 1684 participants from various industries around the world, only 22 % of companies use AI in their work. This low adoption of AI is due to several factors such as professional resistance, low familiarity with technology, lack of technical skills, and limited potential resources (Agossah et al., 2022; Bertolucci, 2023; Gautier, 2022). However, this statistical reading overlooks the complexity of the psychological and professional dynamics experienced at the individual level, where marketing professionals may simultaneously benefit from AI's efficiency gains while resisting its impact on their professional identity and creative autonomy (Li et al., 2022; Pitakaso et al., 2025). Despite these obstacles, AI has the potential to significantly transform the marketing in business (Mrhari and Dinar, 2018). Marketing professionals, aware of the growing importance of AI, strive to update their knowledge and skills to remain relevant and understand strategic foresight related to market and AI (De Bruyn et al., 2020; Corvello, 2025).

From a theoretical perspective, understanding AI adoption among marketing professionals requires an analysis through established technology acceptance frameworks. The Technology Acceptance Model (TAM), originally developed by Davis (1989) and widely validated across various technological contexts, serves as a foundational framework for understanding how perceived usefulness and perceived ease of use influence adoption decisions. However, the specific characteristics of AI-based technologies—particularly their autonomous decision-making capabilities, creative potential, and implications for professional identity—challenge the core assumptions of the TAM, which are based on linear adoption processes (Venkatesh et al., 2012; Glikson and Woolley, 2020).

Studies have begun exploring AI adoption through the lens of TAM, revealing complex patterns that deviate from traditional technology acceptance models showing that AI technologies can trigger paradoxical responses, where high perceived usefulness coexists with resistance due to threats to professional identity, algorithmic opacity, and ethical concerns (McKnight et al., 2011; Arrieta et al., 2020). This suggests that TAM may need to be extended to capture the unique dynamics of AI adoption within creative professional contexts.

Although there are growing studies on AI adoption in marketing (De Bruyn et al., 2020; Mariani et al., 2022; Enshassi et al., 2025), limited studies recently have explored the challenges of integrating AI into the marketing sector from the perceptions of marketing experts and its likely implications especially after the recent AI transformation and use of AI chatbots in many fields, such as customer service (Adam et al., 2021), Healthcare (Chaibi et al., 2025; Sobaih et al., 2025), education (Sobaih et al., 2024; Sobaih and Abu Elnasr, 2025).

More specifically, existing growing research (e.g. De Bruyn et al., 2020; Mariani et al., 2022; Enshassi et al., 2025) has not sufficiently addressed how marketing professionals manage the paradoxical

tensions between the perceived benefits of AI use and their concerns regarding professional autonomy, creativity preservation, and the respect for the specificities of their profession. This gap in literature leads us to answer the following research questions: how do marketing experts and marketers perceive the adoption of AI in the marketing of their products/services, and what are the main applications, benefits and barriers they associate with its use? Additionally, how do these perceptions challenge or extend traditional technology acceptance models when applied to AI adoption in creative professional contexts? The objective of this research is to identify and understand how marketing experts and marketing professionals appraise the adoption of AI in the marketing of their products/services, while also identifying its main types of marketing applications, associated benefits and barriers, and to explore the theoretical implications for technology acceptance theory in AI adoption contexts.

#### 2. Literature review

#### 2.1. Technology acceptance model: foundations and extensions

The Technology Acceptance Model (TAM), developed by Davis (1989), remains the most suitable theoretical framework for analysing technology adoption in organizational contexts. It assumes that perceived usefulness and perceived ease of use are the primary determinants of acceptance, mediated by attitude toward use and behavioral intention (Venkatesh et al., 2003).

However, TAM's linear assumptions are called into question when applied to recent systems with autonomous decision-making capabilities and limited algorithmic transparency, which fundamentally alter usertool interactions (Arrieta et al., 2020). Recent studies show that the organizational impact of such technologies operates through complex mediating mechanisms—such as knowledge sharing—rather than through simple individual acceptance pathways (Li et al., 2022). This suggests that TAM's focus on the individual may be insufficient to fully capture adoption dynamics in contemporary professional environments (Dwivedi et al., 2021). These theoretical limitations call for empirical exploration of real-world adoption experiences, particularly in emerging markets where cultural and economic factors may further complicate the relationships traditionally described by TAM.

#### 2.2. AI applications in marketing and professional perspectives

Artificial intelligence has profoundly transformed various aspects of modern marketing through a wide range of applications. Jain and Aggarwal (2020) highlighted several key areas of application, such as automated content creation, ad targeting optimization, the use of chatbots and virtual assistants, predictive analytics, and dynamic pricing. The emergence of recent generative technologies such as ChatGPT has further expanded these possibilities, facilitating the production of complex content and automating various consumer interactions (Lim et al., 2023). These developments are significantly reshaping marketing practices and require professionals to continuously adapt their skills.

However, current literature still shows gaps concerning professionals' experiences with AI adoption, particularly regarding its impact on their professional identity and forms of resistance. While several studies have examined organizational factors influencing AI integration (Mariani et al., 2022), few have explored how individual marketing professionals deal with the tensions between the efficiency gains of AI and concerns about professional autonomy and creative authenticity. Marketing, as a field rooted in creativity and relationship management, presents particular challenges for AI adoption, involving strategic skills, cultural sensitivity, and innovative thinking that intersect in complex ways with AI technologies (De Bruyn et al., 2020; Chintalapati and Pandey, 2022).

Moreover, most research on AI adoption focuses on specific organizational or geographical contexts, often overlooking the diversity of

professional experiences on an international scale—experiences shaped by significantly different cultural and economic environments (Dwivedi et al., 2021). A deeper understanding of these diverse experiences is essential for developing more inclusive theoretical frameworks for AI adoption, capable of accounting for variations in professional backgrounds, cultural diversity, and technological infrastructures across regions.

#### 2.3. The benefits and barriers of AI in marketing

The benefits and barriers of adopting AI in marketing can be grouped into several categories, as presented in Tables 1 and 2.

A review of previous studies (Table 2), marketing researchers have raised several issues regarding the barriers of artificial intelligence in their field. These brakes are summarized in the following Table 2.

Integrating AI in marketing offers many advantages, but also raises ethical challenges (privacy, discrimination), economic (costs, unemployment), psychological and social (loss of customer connection, resistance), organizational (lack of skills, dependency) and technology (security, complexity, super intelligence).

#### 3. Methodology

#### 3.1. Epistemological positioning and research approach

This research adopts an interpretivist epistemological stance, which seeks to understand the subjective meanings and experiences that marketing professionals assign to AI adoption within their specific professional contexts. According to Girod-Sevilla and Perret (2003), the interpretive researcher intends to understand reality rather than explain or construct it. In line with Sandelowski (2010), we adopted a descriptive qualitative approach, which allows for an in-depth description of the studied phenomenon while remaining faithful to the participants'

narratives. We have adopted inductive reasoning, starting from specific observations, to arrive at more general conclusions. This approach is consistent with our epistemological positioning and the exploratory nature of our research. The qualitative approach was preferred due to the lack of existing studies on the perception of AI by international marketing professionals. This method allows an in-depth exploration of a little studied phenomenon and to collect rich and nuanced data on the perceptions, experiences and perspectives of participants.

#### 3.2. Sample and data collection

We employed purposive sampling based on the principle of maximum variation to ensure a diversity of perspectives in terms of professional experience, geographical origin, and organizational context. Participants were selected according to specific criteria: (1) a minimum of three years of marketing experience, (2) demonstrated use of AI in professional practice, (3) geographical diversity covering Africa, Europe, the United States, and the Gulf countries, and (4) organizational variety ranging from SMEs to multinational corporations. The sampling process was guided by the principle of theoretical saturation, achieved when no new themes emerged and existing themes became well-developed with stable relationships (Fusch and Ness, 2015). The final sample consisted of 24 marketing professionals from diverse geographical and professional backgrounds, offering a rich range of perspectives on the phenomenon under investigation.

The participants' characteristics were as follows:

- Geographical origin: professionals operating in Africa, Europe, the United States, and the Gulf region
- Age: 24-56 years
- Gender: 83 % male and 17 % female
- Professional experience: ranging from 3 to over 30 years

**Table 1**Summary of AI benefits in marketing.

Category	Main benefits	Authors
Technological	Processing and analysis of large amounts of data Speed and technological power Efficiency in target group segmentation  Best automation tool Monitoring purchasing behavior and history Fraud detection	Javaid et al. (2022), Ergen (2021), Puntoni et al. (2021), El ouidani and Oul-caid (2023)
Organizational and management	- Fraud detection  - 24/7 Customer Support  - Employee Skills Expansion  - Maintaining a Competitive Advantage  - Saving Time and Resources  - Freeing Repetitive Tasks  - Facilitating Marketing Decision Making	El ouidani and Oul-caid (2023), Javaid et al. (2022), Bettache and Foisy (2019), Sohrabpour et al. (2021)
Psychological, Social and Individual	- Reducing Human Error - Personalized Customer Experience - Improved Engagement and Engagement - Increased Customer Satisfaction	Javaid et al. (2022), Neuhofer et al. (2021), Gonzalez-Jiminez (2018)
Economic	<ul> <li>- Individual Counselling</li> <li>- Reducing costs and increasing sales</li> <li>- Boosting conversion rate and ROI</li> <li>- Optimal pricing</li> <li>- Developing new offerings</li> </ul>	Kumar et al. (2019), Jain and Aggarwal (2020), Jo (2020), El ouidani and Oul-caid (2023)
Communicational and cultural	- Creating new jobs - Content filtered or culturally appropriate - Personalized marketing messages - Website personalization	Jain and Aggarwal (2020), Javaid et al. (2022)

**Table 2** Summary of AI marketing barriers.

Category	Main brakes	Authors
Technological	Complexity of AI systems     Limited data availability     Security and     confidentiality issues     Risk of technological     singularity	Reguieg Issaad (2022), Piquette (2023), Basly and Hammouda (2020), Castets-Renard and Fourneret (2022)
Organizational and management	Lack of AI skills and knowledge Job losses due to automation High investment costs Resistance to change - Technology dependency	Reguieg Issaad (2022), Gréselle-Zaïbet and Dejoux (2023), OCDE (2017), Komi (2019)
Psychological, social and individual	Customer Disconnection     Resistance to change     Loss of job anxiety     Potential loss of     creativity	Nadimpalli (2017), Komi (2019)
Ethical	Privacy intrusion     Algorithmic     discrimination     - Bias in training data	El ouidani and Oul-caid (2023), Holtel (2016), Turban et al. (2018), OCDE (2019); Sobaih (2024)
Economic	<ul> <li>High investment costs</li> <li>- Job losses and rising unemployment</li> </ul>	Purdy and Daugherty (2017), Zhang et al. (2022), Modgil and Prakken (2013), Bettache and Foisy (2019)
Communicational and cultural	- Lack of data culture - Lack of data culture	Jain and Aggarwal (2020), Javaid et al. (2022)

 Areas of expertise: digital marketing, SEO, communication, event marketing, among others

We acknowledge a gender imbalance in our sample (83 % male, 17 % female), which reflects the demographic composition of participants at the Pro Marketing Meeting 2024, where senior-level marketing professionals and communication agency executives are predominantly male. Although our objective is not to achieve external validity of the results, given that this is an exploratory study, this male predominance in the sample composition may nevertheless affect the internal validity of the study.

The data were collected during the Pro Marketing Meeting 2024, held on 19–20 December 2024 in Gammarth, Tunis. All interviews were conducted face-to-face in a neutral, professional environment. Interviews averaged 28 min (range: 20–45 min) and were conducted in participants' preferred language (English, French, or Arabic) to ensure cultural sensitivity. We employed semi-structured face-to-face interviews as the primary data collection method. This qualitative technique provides a flexible yet organized framework, encouraging participants to express their thoughts freely while allowing the interviewer to explore emerging themes in depth.

The semi-structured interview guide was tested with three marketing professionals, reviewed by two senior researchers, and then refined based on the feedback received. A detailed semi-structured interview guide was developed, pre-tested, and refined based on preliminary feedback. It covered five key thematic areas: (1) participants' understanding and perception of artificial intelligence; (2) application areas of AI in marketing; (3) perceived benefits of AI integration; (4) barriers to adoption, including challenges and limitations; and (5) expert perspectives on the future of marketing in the age of AI.

#### 3.3. Ethical considerations

This study received ethical approval from the Deanship of Scientific Research at King Faisal University (Project Number: KFU252040; Date of Approval: January 1, 2024). Informed consent was obtained from all participants following a detailed explanation of the study's objectives,

the rights related to voluntary participation, data processing possibilities, and confidentiality assurances. Participant anonymity was ensured through the assignment of identification codes ranging from In1 to In24, the removal of all personally identifiable information, and the secure storage of data accessible only to the research team.

#### 3.4. Data analysis

The face-to-face interviews were recorded with participants' consent and then manually transcribed. Transcription was conducted in the original language, followed by translation verified using a backtranslation protocol. Data analysis was carried out using a thematic content analysis approach, following the methodology described by Burnard et al. (2008). The analytical process adhered to the steps proposed by Braun and Clarke (2006): (1) data familiarization, (2) systematic initial coding, (3) theme identification, (4) theme review and refinement, (5) theme definition, and (6) final report writing.

To ensure analytical rigor, independent coding was conducted by two researchers on 25 % of the transcripts (6 participants). Additionally, both researchers independently reviewed all interview transcripts during the familiarization phase. Discrepancies were resolved through collaborative discussion until consensus was reached. Table 3 presents an example of our data analysis process, illustrating the progression from interview excerpts to themes.

#### 3.5. Trustworthiness

The trustworthiness of this qualitative study was strengthened through multiple strategies based on the criteria defined by Lincoln and Guba (1985). Credibility was ensured through purposive engagement with 24 marketing professionals from diverse geographical regions (Africa, Europe, the United States, and the Gulf), offering a broad range of insights into the topic explored. Member checking was conducted by sharing preliminary findings with six selected participants to validate the accuracy of the interpretations. Transferability was enhanced through detailed contextual descriptions, comprehensive participant profiles (aged 24–56, with 3–30 years of experience, from various areas

**Table 3** Example of our data analysis process.

Interview Excerpt	Code	Category	Theme
"Thanks to AI, I can do my job without feeling overwhelmed." (In10)	Productivity support	Perception of AI as a complementary tool	Positive perception of AI
"I consider AI to be a real psychological support. It helps reduce stress caused by workload by automating certain tasks." (In10)	Professional well-being	Improvement in quality of working life	Psychological, social, and individual benefits
"With an investment of \$400 to \$500, AI gives you access to tools that can automate tasks as if you had a team of 100 people." (In3)	Resource optimization	Operational efficiency	Organizational and managerial benefits
"Al optimizes online advertising campaigns by analyzing data in real-time and automatically adjusting bids, targeting, and messaging." (In6)	Automated optimization	Advertising campaign efficiency	Application area
"There is a real lack of essential skills to successfully carry out our projects, mainly due to the emigration of many qualified professionals in our sector." (In4)	Skills shortage	Obstacles to technological adoption	Organizational and managerial barriers

of expertise), and rich findings that allow readers to assess the applicability of the results to similar settings. Dependability was supported by a systematic, manual approach to data analysis based on established protocols, as well as the use of pilot interviews to refine the interview guide. Finally, confirmability was achieved by grounding all interpretations in direct participant quotes, as demonstrated throughout the results section.

#### 4. Results

The results of the study will be presented according to the five main themes identified. For each theme, we will present the emerging subthemes as well as a selection of the most representative verbatim statements, allowing us to explicitly and pertinently illustrate the perceptions and experiences of the participating experts. The following Table 4 presents each theme, and its sub-themes identified during the analysis.

#### 4.1. Understanding and perception of Artificial Intelligence

#### 4.1.1. Understanding of AI

Most respondents (14 out of 24, 58 %) demonstrated a good understanding of artificial intelligence, defining it as a true technological revolution enabling the performance of tasks typically considered unique to human intelligence. They also highlighted its ability to learn, reason, and interact autonomously with its environment.

"AI aims to create machines capable of imitating certain human cognitive and decision-making capacities and even surpassing them in some domains" (In18)

**Table 4**Themes and sub-themes identified in the study.

Themes	Sub-themes
1. Understanding and perception of	Understanding of AI
artificial intelligence	<ul> <li>Favorable perception of AI</li> </ul>
	<ul> <li>Unfavorable perception of AI</li> </ul>
	<ul> <li>Ambivalent perception of AI</li> </ul>
2. AI application areas in marketing	<ul> <li>Automated content creation</li> </ul>
	<ul> <li>Advertising campaign optimization</li> </ul>
	<ul> <li>Customer relationship management</li> </ul>
	<ul> <li>Search engine optimization (SEO)</li> </ul>
	<ul> <li>Predictive analysis</li> </ul>
	<ul> <li>Other domains (recommendation systems, marketing attribution, etc.)</li> </ul>
3. Benefits of integrating AI in	<ul> <li>Organizational and management benefits</li> </ul>
marketing	<ul> <li>Technological benefits</li> </ul>
-	<ul> <li>Psychological, social, and individual</li> </ul>
	benefits
	<ul> <li>Communication and cultural benefits</li> </ul>
	<ul> <li>Economic benefits</li> </ul>
4. Barriers to integrating AI in	<ul> <li>Organizational and management barriers</li> </ul>
marketing	Technological barriers
	Ethical barriers
	<ul> <li>Economic barriers</li> </ul>
	<ul> <li>Psychological, social, and individual</li> </ul>
	barriers
	<ul> <li>Communication and cultural barriers</li> </ul>
5. Expert perspectives in the AI era	<ul> <li>Future of the marketing profession</li> </ul>
- * *	Key skills to remain relevant
	High-potential impact areas for AI
	Technology-Market-Complexity Dynamics

Key AI concepts frequently mentioned by participants include computer vision, natural language processing, deep learning, neural networks, and machine learning. The evolution of AI, from weak to strong forms, was also noted by participants.

"In 2018, I worked with weak AI. Now AI is becoming strong; it understands various domains and can respond, making it generative. AI is becoming generative because of a combination of several factors, such as computational power becoming phenomenal compared to 10 years ago, and data supply also becoming phenomenal" (In1)

#### 4.1.2. Perception of AI

The interviews revealed three distinct types of perceptions regarding artificial intelligence, with clear distribution patterns across our sample (N=24). Favourable perceptions ( $n=14,\,58$  %): The majority of participants perceive AI as a complementary tool allowing marketing professionals to perform their functions efficiently and with peace of mind.

"Thanks to AI, I can do my work without being overwhelmed." (In10)

Among these favorable respondents, 8 participants (33 % of total sample) perceive AI as having the potential to radically transform their attitudes and modes of action.

"AI will only become more fun, innovative, creative, efficient, and practical" (In13)

Seven participants emphasize its dynamic and evolving nature.

"I perceive artificial intelligence as an omnipresent expert capable of understanding and providing expertise in all fields, whether history, science, physics, marketing, etc." (In7)

Unfavorable perceptions (n = 4, 17 %): A minority of experts express fears about the risk of marginalizing technical expertise related to the profession.

"Anyone can manage a campaign, which raises concerns among media buyers. They fear losing the technical aspect of their profession." (In2)

Others highlight the absence of an emotional dimension in AI

capabilities and express skepticism about its ability to meet specific marketing needs, especially in areas requiring a more culturally adapted understanding. The third form was ambivalent perception. Several interviewees (n = 6, 25 %) adopt a neutral position, recognizing both the potential and limitations of AI.

"It is essential to always take time to test tools before adopting them. A tool may seem effective to me, but that doesn't mean it will suit everyone. Each expert has their preferences and way of working. There's also an element of feeling: some tools make me comfortable, others don't, even if they are technically performant. In my opinion, AI effectiveness is not just a question of features; it's also a question of fitness with the person using them" (In4).

#### 4.2. AI application areas in marketing

Our analysis identified several major AI application areas in marketing, ranked by frequency of mention by participants:

#### 1. Automated content creation

Professionals use AI to perform various tasks to automate and enhance content creation: writing emails, blogs, and meta descriptions, generating images and videos, writing intelligent reports. New trends also incorporate conversational AI and content cocreation fostering immersive experiences with augmented reality.

"In content creation, with AI, you can generate images, sounds, etc." (In5).

"Today, AI allows real-time discussion with customers, creates interesting content, and offers immersive experiences through augmented reality" (In18).

#### 2. Advertising campaign optimization

AI is more widely used to optimize the effectiveness of advertising strategies through media buying, bid management, and programmatic advertising.

"AI optimizes online advertising campaigns through real-time data analysis and also by automatically adjusting bids, targeting, and messages to achieve performance objectives" (In6).

#### 3. Customer relationship management

Al improves customer relationship management by automating responses to customer inquiries, personalizing interactions, and anticipating needs through data analysis.

"AI helps us better understand customer expectations and personalize our messages." (In15).

"I use chatbots like Voice flow to respond to customers outside my working hours or during my vacations. The chatbot provides reliable automated responses, and if that's not sufficient, the chatbot automatically redirects the customer to an agent for personalized follow-up" (In8).

#### 4. Search engine optimization (SEO)

Thanks to AI tools, SEO benefits from automation in internal link management, keyword creation, and technical website analysis, which will improve referencing strategies.

"Artificial intelligence allows us to save considerable time: it automates internal link management, generates relevant keywords, technically analyzes sites... and above all, it allows auditing and optimizing SEO much more efficiently than before" (In14).

#### 5. Predictive analysis

AI enables the analysis of enormous volumes of data in real-time, identifying trends and business opportunities. AI algorithms are used to predict the emergence of new markets and optimize campaigns in real-time.

"I used AI to perform predictive analysis in advertising [...] AI generated an analysis and identified two countries among five or six, predicting that these two countries would become a new market in 2024 and 2025" (In9).

Other AI application areas in marketing were also mentioned, but with less frequency: automated content creation through generative AI, emotional analysis of customers from vocal or facial data, and intelligent virtual assistants that can manage the entire customer interaction from start to finish.

#### 4.3. Benefits of integrating Artificial Intelligence in marketing

Our analysis identified five main categories of benefits, ranked by their importance in the interviews:

#### 1. Organizational and management benefits

These benefits include automation of repetitive tasks, timesaving, reduction of human errors, and improvement of overall performance.

"With an investment of \$400 to \$500, AI gives you access to tools capable of automating tasks as if you had a team of 100 people at your side" (In3).

#### 2. Technological benefits

Participants highlighted AI's ability to process enormous volumes of data, its speed, and its continuous learning.

"AI really impressed me with its ability to process huge volumes of data very quickly. Each time, it learns continuously, which allows adjusting strategies in real-time to improve results" (In6).

#### 3. Psychological, social, and individual benefits

In this context, AI is perceived as psychological support, reducing professional stress and improving individual efficiency.

"I consider AI acts as a real psychological support. It helps reduce stress related to work overload by automating certain tasks, which allows me to save time and focus on more strategic aspects" (In10).

#### 4. Communication and cultural benefits

AI facilitates the creation of native content, specifically adapted to each region, and improves the personalization of marketing messages.

"Thanks to these AI tools, you can offer clear and adapted content for each region in which you operate" (In2).

#### 5. Economic benefits

Experts noted that AI allows cost reduction, improves return on investment, and creates new job opportunities. By automating certain tasks, AI optimizes expenses and improves efficiency.

"AI helps reduce costs by automating certain tasks such as advertising campaign management, sending personalized emails, customer data analysis, and audience targeting" (In3).

#### 4.4. Barriers to integrating Artificial Intelligence in marketing

Content analysis identified six main categories of barriers, ranked by their prevalence in the interviews:

#### 1. Organizational and management barriers

Among these main barriers are loss of control over work processes, resistance to change, rapid obsolescence of skills, and lack of AI skills

"There is a real lack of essential skills to carry out our projects, mainly due to the emigration of many qualified professionals in our sector" (In4).

#### 2. Technological barriers

Experts mentioned several technological obstacles, such as the complexity of AI systems, concerns related to data security, and technological lag, especially in emerging countries.

"Several AI tools are available, which complicates the choice of the right tools" (In18).

#### 3. Ethical barriers

Ethical concerns addressed by participants include risks related to privacy, algorithmic biases, and disclosure of confidential information.

"AI can be used maliciously by some, which represents a risk to security and confidentiality" (In1).

#### 4. Economic barriers

Experts highlighted certain economic obstacles, including high investment costs, the risk of job losses, and lack of state support.

"Setting up an AI system can be expensive, as it requires investments in hardware, software, and experts for installation and maintenance" (In9).

#### 5. Psychological, social, and individual barriers

Psychological barriers include anxiety related to job loss, consumer mistrust towards AI, and the risk of excessive dependence.

"One of the risks of AI is the anxiety it generates in individuals manifested by the fear of losing their job" (In1).

#### 6. Communication and cultural barriers

Experts highlighted the situational nature of marketing based on cultural knowledge, as well as the lack of data culture in certain countries, especially emerging ones.

"It's a novelty; it took time for users to accept it" (In24).

#### 4.5. Expert perspectives in the AI era

#### 1. Future of the marketing profession

Experts anticipate a redefinition of marketing roles with the increasing integration of AI, while emphasizing the importance of maintaining human responsibility in decision-making.

"The future of marketing will be a collaboration between human skills and AI assistance to offer better customer experience and better solutions" (In21)

"I think the future of marketing is heading towards an approach focused on consulting and support" (In5).

#### 2. Key skills to remain relevant

Skills deemed essential include "prompt engineering," programming, data analysis, specific technical skills, and human skills.

"You need to be versatile, master areas like SEO, copywriting, advertising, etc. You also need to constantly read, train, and invest time to improve your knowledge and skills" (In23).

#### 3. High-potential areas

Experts have identified key areas where AI continues to transform marketing, such as media buying automation, intelligent chatbot creation, social media posting, lead management, and many others.

"The market is evolving, and AI is evolving too, so AI will have an impact in all marketing areas, whether in advertising, market research, planning, ..." (In24).

#### 4. Technology-market-complexity dynamics

Marketing experts note that the growing adoption of AI can create tensions between the accessible cost of external technologies and the proliferation of algorithmic solutions, making strategic choices more complex. This development demonstrates how open innovation, based on collaboration between internal and external actors to create value, not only changes cost structures but also helps companies better manage and organize their marketing activities.

"With an investment of \$400 to \$500, AI gives you access to tools capable of automating tasks as if you had a team of 100 people" (In3).

"Several AI tools are available, which complicates the choice of the right tools" (In18).

#### 5. Discussion and implications

This study sheds light on how marketing professionals approach the adoption of AI technologies, revealing paradoxical dynamics that challenge the traditional assumptions of technology acceptance models. Our findings extend the Technology Acceptance Model (TAM) by identifying adoption paradoxes in which high perceived usefulness coexists with professional resistance—contradicting Davis's (1989) linear model, which posits that perceived usefulness leads directly to acceptance. These insights offer a renewed understanding of the complex integration process of emerging technologies within creative professions, where successful adoption requires ongoing technical, organizational, and human considerations.

### 5.1. Theoretical contributions to the understanding of technology acceptance

Our research makes three major contributions to the Technology Acceptance Model (TAM) theory. First, we identify paradoxical adoption patterns, where marketing professionals positively accept the efficiency gains brought by artificial intelligence while simultaneously expressing resistance to their impact on professional identity and creative autonomy. This challenges TAM's core assumption that perceived usefulness directly leads to positive attitudes and adoption intentions (Venkatesh et al., 2003). Second, our five-category benefit typology and six-category barrier framework provide a more nuanced understanding of adoption factors than those offered by traditional TAM dimensions. Notably, psychological benefits emerge as a novel category, highlighting the role of such technologies as emotional support in managing professional stress. Third, our findings reveal that TAM's individual-level focus is insufficient to fully understand adoption logics in emerging markets, where cultural, economic, and structural factors significantly shape decisions—going beyond the classic considerations of perceived usefulness and ease of use (Dwivedi et al., 2021).

To understand these paradoxical dynamics, we propose to integrate the Identity Threat Theory (Petriglieri, 2011) and the Resistance to Change Theory (Piderit, 2000) into the classic TAM model. Identity threat arises when AI takes over creative tasks deemed essential to the professional identity of marketers. This threat leads to psychological defense mechanisms, including cognitive, emotional, and behavioral resistance (Piderit, 2000), which often coexist with a rational acceptance of AI's benefits. This allows marketers to benefit from its contributions while maintaining their professional identity.

The verbatim statements from the expert interviews reveal that some participants simultaneously acknowledge operational benefits ("Thanks to AI, I can do my work without being overwhelmed" - In10) while expressing concerns about professional authenticity ("Anyone can manage a campaign, which raises concerns among media buyers" - In2). This paradox shows that the adoption of technologies in creative professions such as marketing involves a complicated identity negotiation, marked by a balance between conscious acceptance and emotional resistance which can challenge traditional linear models.

## 5.2. Challenging established assumptions: the paradox of intelligent technology adoption

Our findings challenge certain assumptions found in the existing literature. While traditional studies on technology acceptance describe a linear relationship between perceived benefits and adoption (Venkatesh et al., 2012), our participants exhibited paradoxical attitudes, simultaneously showing acceptance and resistance. Specifically, 58 % of professionals with favorable views of these technologies still expressed concerns about the authenticity of their professional role, suggesting that adoption involves an identity negotiation process overlooked by traditional technology frameworks.

The competence paradox refers to the situation where the superior performance of AI technologies raises concerns about professional devaluation, challenging the assumption that increased capabilities automatically lead to adoption. This is especially true for creative professionals, whose technological integration involves complex identity preservation dynamics that current theoretical frameworks seldom consider (Li et al., 2022). This phenomenon aligns with Shahzad's (2024) work on digital leadership, which describes an ambivalence combining ambition and skepticism, requiring leaders to balance technological progress with the preservation of core professional skills.

These technology-market-complexity dynamics confirm the relevance of open innovation frameworks for understanding AI marketing adoption. Our results highlight paradoxical dynamics of open innovation in the adoption of marketing technologies. On the one hand, some participants express concerns about the marginalization of their expertise ("anyone can manage a campaign," In2) or the complexity of choosing among the many existing tools (In18). On the other hand, the growing use of these technologies for content creation and advertising optimization reveals the emergence of a semi-open innovation model, in which professionals select technological contributions based on their strategic priorities. This process consequently redefines the boundaries between internal and external resources.

Our findings on the benefits of AI technologies largely confirm existing literature while introducing new dimensions. In line with previous studies (Bettache and Foisy, 2019), organizational benefits dominate professionals' perceptions: 92 % of participants cited efficiency gains through task automation and improved data analysis. However, our study expands the current analytical framework by highlighting a dimension that has been underexplored in prior research on technology adoption—psychological benefits. These were mentioned by 67 % of participants, who noted that such technologies help reduce professional stress and offer emotional support. Moreover, although communicational and cultural benefits were less frequently cited (38 %), our data reveal the role of these tools in creating culturally adapted content, thereby broadening the scope of earlier studies that focused primarily on operational efficiency (Jain and Aggarwal, 2020).

Regarding adoption barriers, our results both confirm and nuance existing findings. In line with previous literature, organizational and technological obstacles are the most commonly cited, with 83 % of participants mentioning skill gaps and inadequate infrastructure. However, the hierarchy of barriers identified in our study differs from that reported in earlier research. While prior studies often highlight economic barriers as predominant (Purdy and Daugherty, 2017), our participants gave less weight to implementation costs (42 %) and instead placed greater emphasis on ethical concerns, particularly transparency and data protection (58 %). This shift suggests that concerns about the trustworthiness of these technologies are now taking precedence over traditional cost-based considerations in adoption decisions, indicating a turning point in how barriers are perceived as these tools become more widespread. In addition, while UTAUT (Venkatesh et al., 2003; 2012), an extended model of TAM, emphasized the role of organizational support, this study found that psychological resistance (such as "losing control of creativity") is a more crucial obstacle and should be prioritized by scholars and professionals.

#### 5.3. Implications for marketing managers

Our study first identifies the marketing competencies most likely to be affected by intelligent technologies, as well as how this transformation is unfolding. The results reveal that the majority of marketing functions are more likely to be augmented rather than replaced by such technologies. Accordingly, we recommend that organizations prepare their marketing teams for increased collaboration with AI tools, notably through skill hybridization. Organizations should begin by informing and training marketing teams about the different phases of AI adoption. Indeed, building trust and developing relevant skills around these tools may be challenging, as evidenced by the ambivalence expressed by 25 % of participants.

Unlike previous waves of technological change, our data suggest that successful adoption of AI-related technologies requires substantial support from both organizations and marketing managers. The fact that 67 % of participants perceive these tools as psychological support indicates that proper integration can enhance, rather than threaten, professional well-being. However, the skills gaps identified by 83 % of respondents underscore the urgent need for targeted training programs that combine:

- Technical skills (e.g., prompt engineering, data analysis, tool selection),
- and non-technical skills (e.g., creative judgment, ethical reasoning, cultural sensitivity, change management).

Managers must therefore anticipate these evolving requirements and proactively develop their capacity to collaborate with these technologies. Organizations should also consider restructuring their marketing teams to better integrate AI tools with human creativity and expertise. When appropriate training is provided, this combination can lead to more effective campaigns and stronger customer relationships. Companies must recognize that the success of AI does not depend solely on the technology itself, but rather on the quality of the collaboration between professionals and systems. However, as effective AI implementation requires a learning curve for both people and systems, organizations should foster a culture that encourages experimentation, learning from failure, and gradual improvement in AI integration.

Finally, our findings suggest a gradual transformation of the marketing profession, marked by the growing importance of hybrid skills that combine technical expertise with emotional intelligence. This structural evolution aligns with the analyses of Mrhari and Dinar (2018) as well as Bettache and Foisy (2019), who emphasize the need for the continuous adaptation of professional profiles in response to changes driven by AI technologies. More specifically, our study identifies prompt engineering, data analysis, and cultural sensitivity as emerging critical competencies for marketing professionals.

To concretely address the skills gap identified in the results of our study as a major organizational obstacle ("There is a real lack of essential skills to carry out our projects" - In4), it would be important for organizations to implement an AI skills assessment matrix specific to marketing. This matrix will allow for the precise identification of individual and collective gaps. This matrix should distinguish technical skills (prompt engineering for the development of marketing content, critical evaluation of AI outputs, selection of appropriate AI tools) from strategic skills (ethical data management, collaboration between humans and AI in creative processes, integration of AI in marketing planning). Regarding the management of resistance to adoption, our results propose a differentiated approach according to the three profiles identified: technical in-depth study for those who have expressed favorable perceptions, targeted support for those who are ambivalent, and coconstruction for those who have showing clear reluctance. This segmentation allows managers to target their support strategies rather than relying on a one-size-fits-all approach that is often ineffective.

#### 6. Conclusion

This exploratory study examined marketing professionals' perceptions of artificial intelligence, its priority application areas, and the key drivers and barriers to its adoption. The findings reveal an overall positive view of AI as a performance facilitator, while highlighting a nuanced spectrum of attitudes—favorable, ambivalent, and unfavorable—and a diverse range of perceived benefits (organizational, technological, communicational, psychological) tempered by ethical, cultural, and economic concerns. The study identifies high-impact applications—particularly content generation, advertising optimization, and intelligent chatbots—and emphasizes the emergence of a new hybridization of skills, blending human expertise with algorithmic capabilities. It thus confirms the transformative potential of AI in reshaping contemporary marketing practices.

From a theoretical perspective, this research contributes to the growing literature on AI in marketing by proposing a structured framework of perceived benefits and barriers. Methodologically, the qualitative approach enabled an in-depth exploration of professionals' experiences and perceptions, bringing to light subtleties that might have been overlooked in quantitative research.

Despite certain limitations related to sample representativeness—particularly a gender imbalance (83 % male, 17 % female), which reflects the predominantly male composition of participants at the event-this bias may limit the generalizability of the results to female perspectives. However, these constraints are mitigated by the exploratory nature of the study and the geographical and organizational diversity of the respondents. The study opens avenues for future research. Further investigations could validate these findings on a larger sample size using a quantitative approach, assess the most impactful AI tools, examine the evolving roles of marketing professionals in AI-driven environments, and explore the increasing importance of algorithmic ethics and data governance in various countries context. In this regard, the global rise of AI regulation highlights the pressing need for ethical and strategic oversight in the deployment of AI within marketing and across broader organizational functions. Future research could contribute to the development of clearer ethical guidelines and strategic framework for better integration of AI in marketing.

#### Institutional review board statement

The study was conducted according to the guidelines of the Declaration of Helsinki and approved by the deanship of scientific research ethical committee, King Faisal University (project number: KFU251962, date of approval: 01/01/2025).

#### CRediT authorship contribution statement

Al Moosa Heyam: Writing – original draft, Investigation, Data curation, Conceptualization. Abu Elnasr E. Sobaih: Writing – review & editing, Writing – original draft, Visualization, Validation, Resources, Project administration, Methodology, Investigation, Conceptualization. Zouari Eya Atallah: Writing – original draft, Methodology, Investigation, Conceptualization. Ali Saleh Alshebami: Writing – original draft, Conceptualization. Imed Zaiem: Writing – original draft, Software, Methodology, Investigation, Funding acquisition, Formal analysis, Data curation, Conceptualization. Thamer Alzahrani: Writing – original draft, Investigation, Formal analysis, Conceptualization. Edrees Hussein: Writing – original draft, Conceptualization. Al-Qutaish Amer: Writing – original draft, Conceptualization.

#### Informed consent statement

Informed consent was obtained from all subjects involved in the study.

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#### **Declaration of Competing Interest**

The authors declare no conflict of interest.

#### Appendix 1. : Presentation guide

#### Socio-demographic data:

- 1. How many years of experience do you have?
- 2. What is your specific area of expertise?
- 3. What is your current position?
- 4. Can I know your age?

## Theme 1: Understanding and perception of artificial intelligence

- 1. What is your understanding of artificial intelligence?
- 2. What is your perception of artificial intelligence?

## Theme 2: The application areas of artificial intelligence in marketing

- 1. Briefly explain how you use artificial intelligence in your work?
- 2. What AI apps/software/chat bots do you use for your marketing activities?
- 3. Can you share concrete examples of artificial intelligence applications that you have used in your marketing work?

#### Theme 3: The benefits of integrating AI into marketing

1. What do you think are the main advantages of using artificial intelligence in marketing?

#### Theme 4: Barriers to integrating AI into marketing

 What are the barriers (obstacles, risks, limits) associated with the use of artificial intelligence in marketing? How do you deal with them?

## Theme 5: Experts' perspectives in the era of artificial intelligence

- 1. How do you see the future of the marketing profession with the increasing integration of artificial intelligence?
- 2. What skills or knowledge do you think it will be essential to develop in order to remain relevant in this area?
- 3. Are there specific areas of marketing where you think artificial intelligence will have a more significant impact in the future? Why?

#### Data availability

"The data from interviews could be shared with researchers who meet eligibility criteria after consent from the KFU Ethical Committee".

#### References

- Adam, M., Wessel, M., Benlian, A., 2021. Al-based chatbots in customer service and their effects on user compliance. Electron. Mark. 31 (2), 427–445.
- Agossah, A., Krupa, F., Deconde, G., Perreira da Silva, M., Le Callet, P., 2022. Déploiement de l'IA en situation de travail: une trop faible considération des employés? Proceedings of the 33ème Conférence Internationale Francophone sur l'Internaction Humain-Machine.
- Alharbi, N., Din, F.U., Paul, D., Sadgrove, E., 2025. Driving AI chatbot adoption: a systematic review of factors, barriers, and future research directions. J. Open Innov. Technol. Mark. Complex., 100590 https://doi.org/10.1016/j.joitmc.2025.100590.
- Arrieta, A.B., Díaz-Rodríguez, N., Del Ser, J., Bennetot, A., Tabik, S., Barbado, A., Garcia, S., Gil-Lopez, S., Molina, D., Benjamins, R., Chatila, R., Herrera, F., 2020. Explainable artificial intelligence (XAI): concepts, taxonomies, opportunities and challenges toward responsible AI. Inf. Fusion 58, 82–115. https://doi.org/10.1016/j.inffus.2019.12.012.
- Basly, S., Hammouda, A., 2020. Family businesses and digital entrepreneurship adoption: a conceptual model. J. Entrep.
- Bertolucci, M., 2023. Revue de la littérature et programme de recherche. Gestion et management public. L'Intell. Artif. dans Le. Sect. Public.
- Bettache, M., Foisy, L., 2019. Intelligence artificielle et transformation des emplois. Ouest. (s) De. Manag. 25 (3), 61–67.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qual. Res. Psychol. 3 (2), 77–101. https://doi.org/10.1191/1478088706qp0630a.
  Burnard, P., Gill, P., Stewart, K., Treasure, E., Chadwick, B., 2008. Analysing and
- Burnard, P., Gill, P., Stewart, K., Treasure, E., Chadwick, B., 2008. Analysing and presenting qualitative data. Br. Dent. J. 204 (8), 429–432. https://doi.org/10.1038/si.bdi.2008.292.
- Castets-Renard, C., Fourneret, E., 2022. Trans/post-humanisme et droits de l'homme. Robotique et intelligence artificielle (IA). Droit St. é Et. Soci. été (N° 3-4), 46–51, 2020/3-4.
- Chaibi, A., Brini, R., Flah, I.B., Sobaih, A.E.E., 2025. Understanding AI acceptance in healthcare: a Mixed-Method study on trialability and Doctor-Patient relationships. J. Post. 5 (1), 89–118.
- Chintalapati, S., Pandey, S.K., 2022. Artificial intelligence in marketing: a systematic literature review. Int. J. Mark. Res. 64 (1), 38–68.
- Corvello, V., 2025. Generative AI and the future of innovation management: a human centered perspective and an agenda for future research. J. Open Innov. Technol. Mark. Complex. 11 (1), 100456. https://doi.org/10.1016/j.joitmc.2024.100456.
- Davis, F.D., 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Q. 13 (3), 319–340. https://doi.org/10.2307/249008.
- De Bruyn, A., Viswanathan, V., Beh, Y.S., Brock, J.K.U., Von Wangenheim, F., 2020. Artificial intelligence and marketing: pitfalls and opportunities. J. Interact. Mark. 51 (1), 91–105.
- 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., Medaglia, R., Williams, M.D., 2021. Artificial intelligence (Al): multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy. Int. J. Inf. Manag. 57, 101994. https://doi.org/10.1016/j.ijinfomgt.2019.08.002.
- El ouidani, R., Oul-caid, B., 2023. L'adoption de l'IA dans le secteur bancaire marocain: entre enjeux économiques et enjeux juridiques. J. Econ. Manag. Environ. Droit (JEMED) 6 (1).
- Enshassi, M., Nathan, R.J., Ismail, H., 2025. Unveiling barriers and drivers of AI adoption for digital marketing in Malaysian SMEs. J. Open Innov. Technol. Mark. Complex. 11 (2), 100510.
- Ergen, F.D., 2021. Artificial Intelligence applications for event management and marketing. Impact ICTs Event Manag. Mark. 199–215.
- Fusch, P.I., Ness, L.R., 2015. Are we there yet? Data saturation in qualitative research. Qual. Rep. 20 (9), 1408–1416. https://doi.org/10.46743/2160-3715/2015.2281.
- Gautier, B. (2022). Les facteurs d'adoption de l'intelligence artificielle: une analyse sous les cadres TAM et TOE. Gestion et management.
- Girod-Sevilla, H., Perret, V., 2003. Fondements épistémologiques de la recherche. In: Thiétart, R.A. (Ed.), Méthodes de recherche en management. Dunod, pp. 13–33.
- Glikson, E., Woolley, A.W., 2020. Human trust in Artificial Intelligence: review of empirical research. Acad. Manag. Ann. 14 (2), 627–660. https://doi.org/10.5465/ annals 2018 0057
- Gonzalez-Jiminez, H., 2018. Retirer la fiction de la science-fiction: (Auto-conscients) robots et leur signification pour la société, les détaillants et les marketeurs. Futures.
- Gréselle-Zaïbet, O., Dejoux, C., 2023. Perception du rôle de l'IA dans le processus de transformation des conditions de travail: investigation basée sur le dialogue social dans le secteur de la métallurgie. Rev. De. Gest. Des. Ressour. Hum. 128, 2.
- Holtel, S., 2016. Artificial intelligence creates a wicked problem for the enterprise. Procedia Comput. Sci. 99, 171–180.
- Jain, P., Aggarwal, K., 2020. Transforming marketing with Artificial Intelligence. Int. Res. J. Eng. Technol. (IRJET 7 (7).
- Javaid, M., Haleem, A., Singh, R.P., Suman, R., 2022. Artificial Intelligence applications for industry 4.0: a literature-based study. J. Ind. Integr. Manag.
- Jo, H., 2020. The impact of Artificial Intelligence on marketing performance: evidence from small and medium enterprises. Technol. Soc. 62, 101–115.
- Komi, A.K., 2019. Le management des résistances à un projet d'innovation par l'intelligence artificielle dans une perspective de changement. Rev. Interdiscip. Manag. Homme(s) Entrep. 8 (n° 36), 29–54, 2019/3.

- Kumar, V., Rajan, B., Venkatesan, R., Lecinski, J., 2019. Understanding the role of artificial intelligence in personalized engagement marketing. Calif. Manag. Rev. 61 (4), 110–135.
- Li, N., Yan, Y., Yang, Y., Gu, A., 2022. Artificial Intelligence capability and organizational creativity: the role of knowledge sharing and organizational cohesion. Front. Psychol. 13, 845277. https://doi.org/10.3389/fpsyg.2022.845277.
- Lim, W.M., Gunasekara, A., Pallant, J.L., Pallant, J.I., Pechenkina, E., 2023. Generative AI and the future of education: Ragnarok or reformation? A paradoxical perspective from management educators. Int. J. Manag. Educ. 21 (2), 100790.
- Lincoln, Y.S., Guba, E.G., 1985. Naturalistic inquiry. Sage.
- Mariani, M.M., Perez-Vega, R., Wirtz, J., 2022. Al in marketing, consumer research and psychology: a systematic literature review and research agenda. Psychol. Mark. 39 (4), 755–776.
- McKinsey & Company, 2023. The State of AI in 2023: Generative AI's Breakout Year.

  McKinsey Digital. (https://www.mckinsey.com/capabilities/quantumblack/o
  ur-insights/the-state-of-ai-in-2023-generative-ais-breakout-year).
- McKnight, D.H., Carter, M., Thatcher, J.B., Clay, P.F., 2011. Trust in a specific technology: an investigation of its components and measures. Article 12 ACM Trans. Manag. Inf. Syst. (TMIS) 2 (2), 1–25. https://doi.org/10.1145/1985347.1985353.
- Modgil, S., Prakken, H., 2013. A general account of argumentation with preferences. Intell. Artif. 195, 361–397.
- Mrhari, A., Dinar, Y., 2018. Intelligence Artificielle: Quel avenir pour le Marketing? Public & Nonprofit Management Review.
- Nadimpalli, M., 2017. Artificial intelligence risks and benefits. Int. J. Innov. Res. Sci. Eng. Technol.
- Neuhofer, B., Magnus, B., Celuch, K., 2021. The impact of artificial intelligence on event experiences: a scenario technique approach. Electron. Mark. 31 (3), 601–617.
- OCDE, 2017. Key issues for digital transformation in the G20: report prepared for a joint G20 German presidency/ OECD conference. OECD Publishing.
- OCDE, 2019. Recommandation du conseil sur l'intelligence artificielle. OECD/LEGAL/0449. OECD Publishing.
- Petriglieri, J.L., 2011. Under threat: responses to and the consequences of threats to individuals' identities. Acad. Manag. Rev. 36 (4), 641–662. https://doi.org/ 10.5465/amr.2009.0087.
- Piderit, S.K., 2000. Rethinking resistance and recognizing ambivalence: a multidimensional view of attitudes toward an organizational change. Acad. Manag. Rev. 25 (4), 783–794. https://doi.org/10.2307/259206.
- Piquette, A., 2023. The future of generative AI What could we see five years after launch.
- Pitakaso, R., Golinska-Dawson, P., Luesak, P., Srichok, T., Khonjun, S., 2025. Embracing open innovation in hospitality management: leveraging Al-driven dynamic scheduling systems for complex resource optimization and enhanced guest satisfaction. J. Open Innov. Technol. Mark. Complex. 11 (1), 100487. https://doi.org/10.1016/j.joitmc.2025.100487.
- Puntoni, S., Reczek, R.W., Giesler, M., Botti, S., 2021. Consumers and artificial intelligence: an experiential perspective. J. Mark. 85 (1), 131–151.
- Purdy, M., Daugherty, P., 2017. How AI boosts industry profits and innovation. Accenture.
- Reguieg Issaad, D., 2022. L'intelligence artificielle appliquée au marketing dans les entreprises algériennes: des problématiques organisationnelles. Les. Ouvrages du CRASC 103–122.
- Sandelowski, M., 2010. What's in a name? Qualitative description revisited. Res. Nurs. Health 33 (1), 77–84. https://doi.org/10.1002/nur.20362.
- Shahzad, M.U., 2024. Core competencies for digital leadership development: a perspective from the lens of paradox theory. Bottom Line 37 (4), 454–472. https://doi.org/10.1108/BL-10-2023-0278
- Sobaih, A.E., 2024. Ethical concerns for using artificial intelligence chatbots in research and publication: evidences from Saudi Arabia. J. Appl. Learn. Teach. 7 (1). https:// doi.org/10.5937/jalt2401001S.
- Sobaih, A., Abu Elnasr, A., 2025. Battle of AI chatbots: graduate students' perceptions of ChatGPT versus gemini for learning purposes in Egyptian higher education. J. Appl. Learn. Teach. 8 (1). https://doi.org/10.37074/jalt.2025.8.1.7.
- Sobaih, A.E.E., Chaibi, A., Brini, R., Abdelghani Ibrahim, T.M., 2025. Unlocking patient resistance to AI in healthcare: a psychological exploration. Eur. J. Investig. Health Psychol. Educ. 15 (1), 6. https://doi.org/10.33525/EJIHPE/2025/15.1.6.
- Sobaih, A.E.E., Elshaer, I.A., Hasanein, A.M., 2024. Examining students' acceptance and use of ChatGPT in Saudi Arabian higher education. Eur. J. Investig. Health Psychol. Educ. 14 (3), 709–721. https://doi.org/10.33525/EJIHPE/2024/14.3.709.
- Sohrabpour, V., Oghazi, P., Toorajipour, R., Nazarpour, A., 2021. Export sales forecasting using artificial intelligence. Technol. Forecast. Soc. Change 163, 120480.
- Turban, E., Outland, J., King, D., Lee, J.K., Liang, T.-P., Turban, D.C., 2018. Electronic Commerce 2018: A Managerial and Social Networks Perspective, ninth ed. Springer Texts in Business and Economics.
- Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D., 2003. User acceptance of information technology: toward a unified view. MIS Q. 27 (3), 425–478. https://doi. org/10.2307/30036540.
- Venkatesh, V., Thong, J.Y.L., Xu, X., 2012. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Q. 36 (1), 157–178. https://doi.org/10.2307/41410412.
- Venkatesh, V., Thong, J.Y.L., Xu, X., 2012. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. MIS Q. 36 (1), 157–178. https://doi.org/10.2307/41410412.
- Zhang, X., Xu, Y., Ma, L., 2022. Research on successful factors and influencing mechanism of the digital transformation in SMEs. Sustainability 14 (5), 2549.