Artificial Intelligence in Corporate Communications: Determinants of Acceptance and Transformative Processes

Journal:	*Corporate Communications: an International Journal*
Manuscript ID	CCIJ-04-2024-0051.R2
Manuscript Type:	Original Article
Keywords:	Artificial Intelligence, Communications technology, Communication management, Corporate communications, Qualitative methods, Technology Acceptance

SCHOLARONE™
Manuscripts

Artificial Intelligence in Corporate Communications: Determinants of Acceptance and Transformative Processes

Corporate Communications: an International Journal

ARTIFICIAL INTELLIGENCE IN CORPORATE COMMUNICATIONS

Structured Abstract

Purpose: This study investigates the determinants of artificial intelligence (AI) acceptance in and AI-driven transformations of corporate communications. From a technology adoption perspective, the study explores the dual influence of individual and organizational factors on AI acceptance.

Design/methodology/approach: Employing a qualitative research design, this study conducted semi-structured interviews with 19 AI experts in large-scale companies in Germany.

Findings: The study reveals micro-level determinants of AI acceptance related to AI's perceived usefulness and ease of use. It also identifies macro-level determinants, including organizational awareness and frameworks. Corporate communications is expected to gain relevance due to the organizational integration of AI.

Originality: By proposing an extension to the technology acceptance model, which incorporates both micro- and meso-level determinants, this study provides a novel framework for holistically understanding AI acceptance in corporate communications.

Research implications: The proposed model integrates crucial factors influencing AI adoption and offers a starting point for quantitative validation. The study serves as a benchmark for future research, particularly given its timing right before the extensive adoption of ChatGPT.

Practical implications: Organizations are encouraged to develop strategies that enhance both individual and organizational AI readiness. By reflecting both micro- and macro-level determinants of AI acceptance, a more holistic understanding of effective change management initiatives related to AI integration can be fostered.

Keywords: Artificial Intelligence, AI, Corporate Communications, Public Relations, Technology Acceptance, Mirco-Institutionalism, Strategy, Digital Transformation

Article classification: Original article (Research paper)

Corporate Communications: an International Journal

Artificial Intelligence in Corporate Communications: Determinants of Acceptance and Transformative Processes

Digital transformation has impacted corporate communications in many companies, ushering in significant changes in this field (Brockhaus *et al.*, 2023). As technological advancements continue to evolve, companies are challenged to adapt to ensure competitiveness. A pivotal driver of digital transformation is the use of artificial intelligence (AI), which disrupts entire business models, capabilities, and communication management frameworks (Kanbach *et al.*, 2024; Zerfass *et al.*, 2020). AI tools are now automating tasks, enhancing customer interaction, and facilitating data analysis (e.g., Buhmann and Gregory, 2023; Panda *et al.*, 2019). The implementation of AI in corporate communications profoundly transforms workflows, with machines assuming roles traditionally managed by humans, thereby challenging established communication processes and strategies (Galloway and Swiatek, 2018). These disruptions offer companies a significant competitive advantage (Borges *et al.*, 2020; Iaia *et al.*, 2024).

However, the individual perceptions of AI are often characterized by skepticism (Brauner *et al.*, 2023; Yigitcanlar *et al.*, 2022). Similarly, the profession of corporate communications is facing significant challenges in adopting AI as we observe indicators for "AI divide" (Zerfass *et al.*, 2019, p. 61) and "AI anxiety" (Johnson and Verdicchio, 2017, p. 2267). These challenges can be classified into micro-level factors, such as a limited understanding of AI among practitioners and ethical concerns, and meso-level factors, such as hesitancy in the top management and unclear responsibilities (Buhmann and White, 2022; Johnson and Verdicchio, 2017; Zerfass *et al.*, 2020).

The benefits of AI use, on one hand, and the hurdles of its adoption, on the other hand, underscore the importance of determining the drivers of AI acceptance in corporate

Corporate Communications: an International Journal

communications. Individual factors, such as personal awareness, knowledge about the technology, and emotional responses, significantly shape attitudes toward AI (Baabdullah, 2024; Carolus e*t al.*, 2023; Sartori and Bocca, 2023). From the organizational perspective, factors such as managerial commitment, knowledge management, and governance are key for successful AI adoption (e.g., Iaia *et al.*, 2024; Polisetty *et al.*, 2024).

Contrary to the evolving nature of AI in corporate communications, little research has been conducted on the drivers of AI acceptance in organizational contexts (Buhmann and Gregory, 2023; Kurup and Gupta, 2022; Neumann *et al.*, 2024). Our paper seeks to fill this gap. Taking a micro-institutional perspective (Cardinale, 2018; Zucker and Schilke, 2019) and through the lens of technology acceptance studies (e.g., Davis, 1985), we identify micro- and meso-level factors that drive the acceptance of AI in communication departments in large-scale companies in Germany. As digital transformation requires companies to undergo structural and operational adaptation (Brockhaus *et al.*, 2023; Kanbach *et al.*, 2024; Zerfass *et al.*, 2020), this study also highlights the perceived transformation of the profession itself.

In particular, we aim to address the following research questions:

RQ1: How is AI acceptance in corporate communications impacted by (a) micro- and (b) meso-level determinants in large-scale companies in Germany?

RQ2: How is the AI-related transformation of corporate communications perceived by large-scale companies in Germany?

We conducted 19 semi-structured interviews with communication experts from large-scale companies and consultancies in Germany, prior to the significant breakthrough of OpenAI's ChatGPT in the market. Large-scale companies, often with international operations and substantial resources, are presumed to be at the forefront of AI adoption. Thus, the study

Corporate Communications: an International Journal

provides pioneering exploratory insights into the drivers of AI acceptance in corporate communications, serving as a critical benchmark in the era of advanced AI tools.

Literature Review

AI Acceptance as Challenge for Corporate Communications

Recently, the term "artificial intelligence" has become ubiquitous across various industries. Despite its widespread use, an all-encompassing definition of AI remains elusive. From a communication management perspective, AI encompasses flexible decision-making processes and actions by software-driven agents that adapt to changing goals and situations, learning from past experiences while also acknowledging its limitations (Zerfass *et al.*, 2020).

In corporate communications, studies on AI's impact are burgeoning but still limited (Buhmann and Gregory, 2023), which is why its full potential for strategic and corporate communications remains underexplored. Concerning the strategic use of AI in the business context, AI has a crucial impact on decision support, stakeholder engagement, automation, as well as product and service offerings (Borges *et al.*, 2020). The strategic use of AI in business contexts highlights the importance of aligning it with business needs and digital strategies to enhance employee engagement and customer experience, ultimately driving the organization's competitive advantage. The effective use of AI can automate processes, create innovative solutions, and improve organizational efficiency. However, adoption of AI in organizations comes with several significant obstacles for strategic communication, including evidence, outcome, and epistemic concerns (Buhmann, 2023; Buhmann and White, 2022). These issues stem from AI's potential to produce inconclusive, biased, or inscrutable results, leading to challenges in transparency, accountability, and stakeholder trust.

Corporate Communications: an International Journal

To overcome these obstacles, AI acceptance in corporate communications is crucial as it forms the foundation for strategically leveraging AI technologies. We argue that acceptance has a dual nature in this context: (1) From a bottom-up perspective, on the micro-level, understanding and fostering AI acceptance among communication professionals ensures successful integration, supporting the effectiveness and innovation of communication strategies (Buhmann and Fieseler, 2023). However, this also requires AI acceptance (2) from a top-down perspective, on the meso-level, which creates the preconditions and processes under which AI can be successfully incorporated into an organization's DNA (Buhmann, 2023; Neumann *et al.*, 2024; Uren and Edwards, 2023).

Drivers of AI Acceptance in Corporate Communications

With technological innovations, fundamental questions about acceptance resurface which are critical for policy makers, technology developers, and companies considering future AI tool implementation. The academic discourse around technology acceptance is not a new phenomenon. A key model in this area is the *technology acceptance model* (TAM; Davis, 1985), which builds upon the *theory of reasoned action* (Fishbein, 1980) and the *theory of planned behavior* (Ajzen, 1991). These foundational theories suggest that an individual's attitudes are a result of their beliefs and assumptions. Over time, the original TAM has been refined and extended. Other theories and models that tackle questions of technology adoption have also been proposed. A general overview of relevant theories and models is presented in Table 1.

Table 1 about here

Corporate Communications: an International Journal

From a methodological viewpoint, technology acceptance studies have primarily applied quantitative designs to investigate influences on technology acceptance (Al-Qaysi *et al.*, 2020). TAM applications mainly include e-commerce, online banking, social media, and e-learning (Al-Emran and Granić, 2021). However, in the specific domain of AI, "technology acceptance is much more idiosyncratic […], presenting unique differences relative to other technology use environments" (Hasija and Esper, 2022, p. 390). In this regard, the flexible nature of the TAM, as well as relevant factors derived from related theories and models, promises a reliable and valid foundation for a qualitative exploration of factors determining AI acceptance.

Davis's (1985) TAM posits that the use of information systems or technologies can be predicted through a stimulus-response model. In this model, the technical characteristics of an information system or innovation act as the stimulus, influencing an individual's motivation and leading to a reaction or response in terms of actual utilization (Al-Emran and Granić, 2021; Davis, 1985). The TAM particularly focuses on the relationship between the design characteristics of a technology and its usage. Davis (1985) postulated that individuals form motivational tendencies shortly after their first exposure to a technology, which then influences their subsequent usage behavior.

In this vein, the TAM delves into four primary factors: (1) the design features of a system as external variables, (2) cognitive response, (3) affective response, and (4) behavioral response (Davis, 1985). The cognitive response, comprising perceived usefulness and perceived ease of use, combined with the affective response (the individual's attitude toward using the system), collectively informs the user's motivation. The behavioral response is ultimately realized as the actual use of the system. The design characteristics of a technical application directly influence

Corporate Communications: an International Journal

the cognitive response of an individual considering technology use. However, as external variables, they do not directly sway the attitude or ultimate actual behavior.

Perceived usefulness within the cognitive response is understood as the degree to which an individual believes that using the system will positively affect their job performance (Davis, 1985). It encompasses six dimensions: enhancement in task performance speed, enhancement in productivity, job ease, performance improvement, job effectiveness, and the perceived individual job benefits of the application. Ease of use refers to the degree to which an individual believes that using the application will require minimal mental or physical effort (Davis, 1985). It significantly impacts perceived usefulness, as easier operation typically leads to optimized work performance and increased productivity (Davis, 1985). Factors related to both perceived usefulness and ease of use can be used as analytical categories to investigate AI adoption.

While Davis's (1985) TAM offers insights into the drivers of technology acceptance from an individual's perspective (at the micro-level), it does not fully address the influence of organizational factors (at the meso-level). Research has shown that factors such as managerial support, commitment, culture, ethics and norms, knowledge management, and governance play a significant role in the organizational adoption of new practices and technologies (e.g., Iaia *et al.*, 2024; Neumann *et al.*, 2024; Polisetty *et al.*, 2024), highlighting the interplay of both micro- and meso-level factors.

This study aims to bridge this gap by taking a micro-institutional perspective. Micro-institutionalism explains how individual actions are shaped by and contribute to organizational structures, cultures, and practices (Cardinale, 2018; Zucker and Schilke, 2019). This interaction, pivotal in understanding technology utilization within organizations, is part of the institutional framework described by DiMaggio and Powell (1983) in their seminal work on institutional

Corporate Communications: an International Journal

isomorphism. The role of individuals within this framework has garnered increasing attention, marked by a shift in focus toward the individual in institutional theory. This shift emphasizes individual agency and its impact on institutional structures and practices.

By combining the micro-level focus of the TAM and related works with the meso-level insights provided by micro-institutionalism, this study offers a more comprehensive understanding of AI acceptance in corporate communications. This dual approach enables an exploration of how individual attitudes toward AI, shaped by perceived usefulness and ease of use, interact with and are influenced by organizational policies, culture, and practices. Such an integrative perspective is vital in understanding the adoption and implementation of AI in the field of corporate communications, where individual and organizational factors are linked. These aspects, especially in the context of AI, have not been sufficiently explored, despite the growing body of work around micro-institutionalism (Zucker and Schilke, 2019).

AI-related Transformation of Corporate Communications

Current scientific discourse on digital transformation, particularly the integration of AI in corporate communications, underscores its transformative potential while simultaneously acknowledging the significant challenges it presents (Zerfass *et al.*, 2019, 2020). Leaning on the unified definition of digital transformation by Gong and Ribiere (2021), AI-related transformation refers to a fundamental change process, enabled by the innovative use of AI accompanied by the strategic leverage of key resources and capabilities, aiming to radically improve corporate communications.

Empirical evidence suggests that many communication managers possess a foundational understanding of AI (Zerfass *et al.*, 2020). However, proactive engagement with AI at the organizational level is less common, with initiatives typically driven by top management. This

Corporate Communications: an International Journal

makes leadership responsible for fostering a culture of continuous learning and providing training opportunities that equip staff with the skills to leverage AI effectively on leadership (Zerfass *et al.*, 2020).

AI will redefine the tasks and roles of communication managers, suggesting a fundamental shift in their functions and responsibilities. Corporate communication departments may become competence leaders in AI integration, spearheading the adoption and effective use of AI within their organizations (Buhmann and Gregory, 2023; Galloway and Swiatek, 2018; Seidenglanz and Baier, 2023). This leadership role will likely necessitate a rise in competencies, continuous training, and learning to keep pace with the rapid integration of AI in corporate communication tasks (Seidenglanz and Baier, 2023). Such an environment fosters a culture of perpetual learning and skill advancement, aligning with the evolving demands of AI-enabled communication landscapes. Moreover, with AI's capacity to increase output, there emerges a corresponding need for more human and individualized communication to maintain and enhance the quality of engagement (Seidenglanz and Baier, 2023). This paradox underscores the need for communication professionals to develop a nuanced understanding of AI's capabilities and limitations, ensuring that the increase in quantity does not compromise the authenticity and personalization of communication.

Methods

To investigate the research questions, we chose an exploratory approach and conducted semi-structured interviews with communication and technology experts in large-scale companies in Germany. Conducted prior to the significant market breakthrough of *OpenAI's ChatGPT*, these interviews provide foundational insights into the challenges and perceptions of adopting

Corporate Communications: an International Journal

AI. This timing is crucial as it establishes a critical benchmark for the pre-*ChatGPT* era, thereby enriching the field with a deeper understanding of the initial attitudes and barriers to adoption.

Sample and Data Collection

To capture a diverse range of perspectives, the sample was designed to include three groups: (1) large companies developing AI tools in-house, (2) large companies using third-party AI tools, and (3) consultancies advising such companies on AI utilization. These groups represent different levels of maturity in adopting digital infrastructure (Brockhaus *et al.*, 2023), thus promising a holistic view on AI-related adoption practices.

Each company was selected based on its engagement with AI—whether through the development, usage, or specialization in AI technologies. In total, 19 companies participated (see Table 2). To mitigate biases arising from the experts' affiliations or perspectives, a diverse range of viewpoints was sought in the sampling process while maintaining the confidentiality of sensitive information. Informed consent was obtained from all participants.

The interviews were conducted via video conferencing between June and July 2022. The interview protocol's efficacy was verified through a pretest. Finally, the interviews, each of which lasted between 20 and 60 minutes, were transcribed using the *f4transcript* software.

Table 2 about here

Coding Procedure

Two coders conducted a qualitative content analysis, encompassing a mix of deductive and inductive coding strategies. Initially, the deductive coding was structured around two main thematic categories derived from the literature: (1) technology acceptance and (2) digital

Corporate Communications: an International Journal

transformation of communication departments. These categories were essential for organizing the data in a manner that facilitated a comprehensive analysis. Technology acceptance was directly informed by the TAM, which has been previously used in qualitative studies on AI adoption (e.g., Hasija and Esper, 2022). We focused on the ease of use, perceived usefulness, and attitudes toward AI use (Davis, 1985). In addition, we considered AI-specific factors for adoption on micro-level like skills, knowledge, and trust (e.g., Baabdullah, 2024; Brauner *et al.*, 2023; Carolus *et al.*, 2023), as well as meso-level factors such as ethical considerations and governance (e.g., Iaia *et al.*, 2024; Polisetty *et al.*, 2024).

To capture emergent themes and nuances beyond the scope of the predetermined categories, inductive coding was also applied. This allowed for the identification of new sub-categories relevant to aspects of technology acceptance (e.g., meso-level determinants) and digital transformation (e.g., communication role concepts). By continuously analyzing the interviews in this way, both the quantity and quality of new codes were found to decrease. Finally, a satisfying degree of theoretical saturation was achieved after the 19 interviews.

Results

General Observations: Awareness and Strategic Potentials of AI

The results broadly suggest a fundamental AI awareness among communication professionals about AI and its transformative potential for corporate communications. All experts demonstrated an extensive knowledge base concerning AI. In terms of AI's strategic potential for purposes of corporate communications, its most substantial impact is envisaged within the realm of public relations. According to the experts, AI tools harbor "extreme potential in much more targeted communication" (E4, consultancy). Current applications predominantly lie in monitoring and analysis tools, which are used for sentiment analysis. These AI applications

Corporate Communications: an International Journal

range from being fully automated to requiring partial human oversight, indicating the technology's versatility.

The strategic decision-making process within communication departments is another area of AI's impact. As noted by some respondents, AI algorithms can suggest communication strategies based on historical data, thus "helping with the decision-making framework" (E19, developer). Furthermore, AI tools play a critical role in overseeing the effectiveness of executed communication strategies.

Content creation and management for communication channels emerge as significant application fields for AI. Additionally, text mining and data preprocessing are identified as crucial sub-segments, illustrating the comprehensive scope of AI in text-related applications. Assistance bots, designed for both internal employee support and external customer communication, represent a further field. Operational efficiency and enhanced management of dialogue in both internal and external communications underscore the broad utility of AI tools. Regarding the relationship between technological efficiency and human judgment, the experts concurred on the importance of human oversight: "They have ultimately the decision about it: Does it fit like this or not?" (E2, developer).

Determinants of AI Acceptance (RQ1)

Despite growing acknowledgment of AI's transformative potential in corporate communications, many experts—especially in companies using third-party applications—exhibit the perception of notable reticence toward embedding AI tools into the operations of communication departments: "We take a very cautious approach because the human factor is still very important to us" (E12, user). This hesitancy prompts an investigation into the forces

Corporate Communications: an International Journal

steering technology acceptance, revealing a complex interplay of dynamics at the individual (micro-level) and organizational (meso-level) levels.

Micro-level acceptance determinants. At the micro-level, individual users' engagement with AI technologies is influenced by a tapestry of drivers, largely matching the predictions rooted in the TAM (Davis, 1985). Sociodemographic factors, notably age, underscore a significant divide, lending credence to the notion of AI divide. This demographic distinction evidences varying levels of openness to AI adoption, suggesting deeper, possibly generational, underpinnings to technology acceptance. Beyond mere age, the experts underscored that personal experiences with and active use of AI emerge as critical determinants fostering a predisposition toward acceptance and facilitating a smoother transition into regular AI tool use: "The perception of the benefits is also shaped by the first use of the technology—regardless of whether the result and its quality are received euphorically or viewed critically" (E11, user).

In almost all interviews, trust emerged as a foundational pillar influencing AI acceptance at an individual level. The notion of deriving an "emotional benefit" (E7, user) from AI use, as articulated by one respondent, elevates acceptance, signifying a profound connection between the user's emotional engagement with technology and their overall attitude toward its use. Moreover, the interviews revealed that subjective norms rooted in a convenient solution and personal beliefs of individuals impact their disposition toward adopting new technologies (Venkatesh and Davis, 2000): "AI gives you so much power to make greater, smarter decisions faster. And I am really looking forward to continuing like build that framework and really empower and educate our colleagues about how much power they have and exactly how much data they can access" (E19, developer). This interweaving of psychological and technological factors, influencing AI's perceived usefulness and ease of use, reinforces the nuanced relevance

Corporate Communications: an International Journal

of micro-level determinants of technology acceptance (Davis, 1985; Trist and Bamforth, 1951; Venkatesh and Davis, 2000; Venkatesh *et al*., 2003).

Meso-level acceptance determinants. Transitioning to the meso-level, the organizational context introduces a distinct set of influences on technology acceptance. The interviews demonstrated that organizational culture and leaders' stance toward AI adoption play instrumental roles as drivers of acceptance. Executives who embody proactive AI use, effectively "through leading by example" (E2, developer), not only demonstrate the tangible benefits of these technologies but also actively cultivate an environment conducive to acceptance among the workforces.

Ethical considerations, particularly around voluntary usage, and equitable functionality of AI tools emerge as critical. Mandated use of technology can engender resistance, underlining the necessity for ethical deployment and utilization frameworks that prioritize voluntary engagement and fairness: "That we don't have a bias and don't run the risk of things going in a bad direction. We need that, and it makes it easier for our teams to have very clear guidelines and to know in which direction things should go. And then, in cases of doubt, they also know whom they can turn to if it could be ethically questionable" (E7, user). Such principled governance fosters a culture of accountability and ethical integrity essential for nurturing trust and acceptance of AI.

Transparency in the adoption and operationalization of AI tools is frequently cited as vital. Engaging users in the technological journey, through comprehensive education and training, fortifies acceptance. This openness, "the cornerstone of our approach" (E8, user), is paramount, ensuring that users are well-informed and adequately prepared for the transition to AI-enhanced workflows.

Corporate Communications: an International Journal

Additionally, tool accessibility and cost considerations cannot be overstated. AI technologies must not only be user-friendly and intuitive but also economically viable for the organization. Prohibitive initial costs or exorbitant maintenance expenses can halt AI integration efforts before they begin, emphasizing the need for financial pragmatism in technology adoption strategies.

Bridging micro- and meso-level determinants: the role of technology itself. Straddling the micro- and meso-levels are intrinsic tool characteristics that either facilitate or impede acceptance. The technology level of the tools, encompassing reliability, user-friendliness, and clarity in functionality, plays a crucial role. Tools that are straightforward to use inspire confidence and foster a more engaging, even enjoyable, interaction with the technology: "Ease of use is paramount. It creates self-assurance, encourages enjoyment, and promotes an autonomous, playful exploration of technology" (E11, user). When users grasp the functionalities and inherent benefits of AI tools, acceptance is naturally bolstered, illustrating the critical intersection of technology's intrinsic qualities with individual and organizational acceptance dynamics.

AI-related Transformation of Corporate Communications (RQ2)

The integration of new tools into the everyday workflows of communication departments raises the possibility of a transformation in corporate communications and its role within the company. Nonetheless, a consensus among all interviewees indicated that the relevance of corporate communications will not decrease by the advent of AI tools in daily operations: "It will never happen that corporate communication is no longer needed" (E8, consultancy). Some experts also acknowledged the advancement of AI as a significant opportunity for the field of corporate communications. They perceived that integrating AI into internal workflows could lead to an increased significance of the communication function within the organization.

Corporate Communications: an International Journal

In this vein, a shift in workflows and an enhancement of processes within communication departments are anticipated. “The nature of work tasks will evolve. We will [...] spend a lot more time really thinking about ethical and moral or strategic elements and perhaps spend less time in these operational functions” (E5, developer). This sentiment was echoed across interviews, suggesting that employees will increasingly focus on the ethical, moral, or strategic aspects of corporate communication, relying less on tasks that can be automated by AI tools.

Moreover, the experts agreed that the communication function’s relevance within companies is set to increase. As new applications are integrated more frequently, the demand for guides or instructors who can facilitate employees’ adaptation to these tools in their work routines will grow. In this evolving landscape, communicators will experience an evolution. As AI becomes an additional internal stakeholder, communication departments are envisioned to gain influence and strategic importance, navigating and mediating the interactions between AI applications and other facets of the enterprise: “We are more likely to become mediators, moderators and fact checkers, quality checkers, […] or AI moderators (E11, user). This evolution implies that the entire communication department’s role will morph into an AI oversight authority. This authority, in collaboration with other departments such as IT, will be responsible for ensuring the safe and continuous functionality of AI tools. One interviewee encapsulated this evolving dynamic: “The more advanced the technology becomes, the more crucial the complementary role—that is, the human element—grows” (E14, developer). This statement underscores the importance of human involvement in the AI application implementation process: a necessity for a human oversight mechanism to monitor the tool’s operation and ensure its proper functioning.

Corporate Communications: an International Journal

Discussion

This study aimed at investigating the potentials, pitfalls, and transformations related to the incorporation of AI-based applications in large-scale companies in Germany, primarily focusing on the acceptance of AI-based applications within corporate communication. Utilizing the *Technology Acceptance Model* (Davis, 1985) and findings from technology adoption studies (e.g., Trist and Bamforth, 1951; Venkatesh *et al*., 2003; Venkatesh and Davis, 2000), we explored both the individual and organizational determinants of AI acceptance.

The results confirmed the prevalence of AI-related divide and a certain degree of AI anxiety, indicative of a hesitancy toward embracing AI tools within the professional fabric of communication departments (Johnson and Verdicchio, 2017; Zerfass *et al.*, 2019; Zerfass *et al.*, 2020). Overall, we found that the adoption and acceptance of AI considerably varies in the communication industry (Buhmann and Gregory, 2023). The trepidation stems from the rapid evolution of AI technology, which is both invigorating and overwhelming.

Despite these apprehensions, the interviews confirmed that technology acceptance is a multifaceted process involving both micro-level (individual) and meso-level (organizational) factors (Bruque and Moyan, 2007; Davis, 1985). Understanding that these factors are interdependent enables an equitable evaluation of technology acceptance. Most participants highlighted factors that influence the adoption of new technologies within a company with the technology itself as the bridging element: demonstrative leadership, systematic guidance, comprehensive training, and the meaningful management of experiences with these technologies (Iaia *et al.*, 2024; Neumann *et al*., 2024; Polisetty *et al.*, 2024).

Indeed, for employees and organizations to navigate the new landscape shaped by AI, guidance is essential. This might manifest as on-the-job training for selected employees who

Corporate Communications: an International Journal

display a propensity for technological fluency. These individuals can then champion the AI integration process, acting as points of contact for colleagues in need of support with these new tools. Consequently, company-wide awareness for the correct application and potential of AI tools can be cultivated.

The findings of this study revealed that the visibility of practical utility and immediate benefits drive the acceptance of AI (Davis, 1985). Lack of clear advantages can lead to skepticism, which might impede the successful adoption of AI within corporate communication workflows. This skepticism, while sometimes correlated with demographic factors, is more accurately attributed to uncertainties regarding the use and organizational integration of AI tools rather than solely to the AI divide associated with older generations (Zerfass *et al.*, 2019). A case in point is the widespread yet unrecognized use of AI functionalities in commonplace applications. Enhancing awareness that AI is already embedded in familiar enterprise tools may mitigate skepticism and bolster broader confidence in engaging with AI technology.

Distinct perceptions were noted among the three studied groups: companies developing their own tools, those using third-party tools, and consultancies advising on AI. Developers express confidence in the use and advantages of the tools they create, understanding their functionalities deeply. This contrasts with the skepticism of those reliant on third-party tools, who lack the intimate knowledge that comes with tool creation, potentially affecting their trust and acceptance. Consultancies, experts in the field, typically advocate for the advantages of AI tool implementation.

A prevailing concern among users is the prospect of being replaced by AI tools, given the efficiency and speed with which AI can accomplish certain tasks. However, the results suggested that the forthcoming change in corporate communication is more likely to be a reshaping of

Corporate Communications: an International Journal

communicator roles and communication efficiency due to the ongoing human−machine symbiosis (Galloway and Swiatek, 2018), not a reduction in force or a move toward complete automation (Panda *et al.*, 2019). Communication professionals will need to adapt to enhanced workflows and assume new responsibilities as AI supervisors or regulatory figures, ensuring the ethical and effective use of AI tools.

The assumption remains that workflows will not be fully automated by AI but will be augmented to support the routine functions of communicators (Zerfass *et al.*, 2023). In this new paradigm, communicators will become pivotal in overseeing AI integration, requiring comprehensive training to serve as authoritative figures in an AI-augmented corporate environment. Such a transition underscores the dual necessity for AI tools to be both powerful in their capabilities and complemented by human oversight, ensuring alignment with ethical standards and organizational goals.

In synthesizing these findings, the future of corporate communication seems to be at a crossroads where AI's promise of efficiency and innovation must be balanced with the indispensable value of human expertise and ethical consideration. As AI continues to permeate corporate communications, the roles within these departments are poised for significant evolution, demanding a recalibration of skills, responsibilities, and strategic objectives to harmonize with this new technological reality. Here, corporate communications might play a crucial role within organizations (Seidenglanz and Baier, 2023), especially when it comes to successfully tackling the strategic, operative, and relational challenges of AI-mediated communication (Guzman and Lewis, 2020; Hancock *et al.*, 2020)

Corporate Communications: an International Journal

Implications

This empirical study broadens the academic landscape regarding AI's role in corporate communications and acknowledges that academic discourse struggles to keep pace with industry developments. While AI remains a nebulous concept for some due to opaque functionalities and a lack of traceability, it is an area ripe for scholarly exploration. In an era where competitive edge is linked to technological innovation, understanding the intricacies of AI is not just beneficial—it is critical. By taking a micro-institutional perspective (Cardinale, 2018; Zucker and Schilke, 2020), this study enhances the academic conversation by examining the drivers of AI acceptance and proposes—from a theoretical implication viewpoint—an extension to the TAM that incorporates determinants from both the micro- and meso-levels (see Figure 1).

Figure 1 about here

The micro-level determinants of our extended TAM draw from the foundational aspects of Davis's (1985) model—perceived ease of use and usefulness—which predict attitudes and adoption behaviors of individual users. The meso-level determinants, however, introduce organizational readiness and organizational frameworks into the equation. Organizational awareness refers to the collective understanding and acknowledgment within an organization regarding the importance and implications of AI adoption. It includes how well the organization's culture supports AI, driven by leadership's proactive stance and ethical considerations. In this regard, organizational awareness emphasizes the role of transparency and ethical deployment, ensuring that all members of the organization are well-informed, engaged, and prepared for AI integration. Organizational frameworks encompass the structural and

Corporate Communications: an International Journal

procedural readiness of an organization to adopt AI, including the presence of clear ethical guidelines, accountability measures, and support systems that ensure the fair and voluntary use of AI tools. Organizational frameworks also address the practical aspects of AI adoption, such as the accessibility of tools, cost-effectiveness, and the availability of comprehensive training programs to facilitate smooth operationalization of AI technologies.

From a practical standpoint, our findings underscore that continuous learning, developing digital expertise, and fostering AI literacy are fundamental for the successful deployment of AI tools. In scenarios where such expertise is lacking, external consultants become essential, facilitating knowledge transfer and bolstering organizational innovation. Communicators and consultants assume the role of AI supervisors, not merely as technical experts but as change agents who empower their colleagues to embrace AI, thereby reinforcing the company's innovative capabilities.

Moreover, adopting best practices from successful innovators becomes a strategic imperative. Isomorphism, or the process by which organizations emulate successful models, can accelerate this learning curve (DiMaggio and Powell, 1983). An in-depth understanding of the factors influencing technology acceptance is key to fostering a productive implementation of AI tools. Thus, the adapted TAM proposed in this study acts as a guiding framework for organizations and individuals navigating the AI adoption process, ensuring that both the micro- and meso-determinants are taken into consideration to facilitate a comprehensive acceptance and use of AI technologies.

Limitations and Conclusion

As this article addresses a highly dynamic field of research, it is essential to acknowledge the inherent limitations. One critical limitation is that this study was conducted prior to the

Corporate Communications: an International Journal

disruptive advent of *OpenAI's ChatGPT 3.5* in November 2022. Consequently, the insights derived may not fully encapsulate the later advancements or the current industry sentiments regarding AI. Despite this, the study serves as a pivotal benchmark at the event horizon of AI integration into daily life and corporate practices.

This temporal context uniquely positions the study as a foundational platform for future academic inquiry, particularly for conducting longitudinal research. An intriguing avenue for subsequent exploration involves a replication study revisiting the same panel of experts. Such an approach would allow for a dynamic comparison between the attitudes captured at the outset of significant AI advancements and the evolving perceptions as these technologies mature and proliferate within the corporate sphere. Additionally, expanding the research sample in future studies could offer a more comprehensive understanding of AI's impact, potentially revealing shifts in the determinants of AI acceptance over time.

Follow-up research is essential for mapping the trajectory of AI acceptance and its integration within corporate communications. Future investigations could also delve into the reasons behind the reluctance or refusal to adopt certain AI applications, providing nuanced insights into the barriers to technology acceptance. Moreover, broadening the scope to include diverse organizational types, such as small and medium-sized enterprises, could shed light on differential impacts and adoption practices of AI technologies. Additionally, the examination of macro-level determinants might be a fruitful avenue for future studies, especially considering the breakthrough of generative AI and its normalization in everyday contexts, which have raised important questions regarding regulatory aspects and industry requirements.

In conclusion, this study marks an important milestone in understanding the initial attitudes toward AI in corporate communications. As such, it invites future research to chronicle

Corporate Communications: an International Journal

the evolving landscape of AI adoption and to continue dissecting the multifaceted dynamics of technology acceptance in an ever-changing digital era.

References

Ajzen, I. (1991), "The theory of planned behavior", *Organizational Behavior and Human Decision Processes*, Vol. 50, pp. 179-211.

Al-Emran, M. and Granić, A. (2021), "Is it still valid or outdated? A bibliometric analysis of the technology acceptance model and its applications from 2010 to 2020", Al-Emran, M. and Shaalan, K. (Ed.s.), *Recent advances in technology acceptance models and theories*, Springer, Cham, pp. 1-12. https://doi.org/10.1007/978-3-030-64987-6_1

Al-Qaysi, N., Mohamad-Nordin, N. and Al-Emran, M. (2020), "Employing the technology acceptance model in social media: A systematic review", *Education and Information Technologies*, Vol. 25, pp. 4961-5002. https://doi.org/10.1007/s10639-020-10197-1

Baabdullah, A. M. (2024), "The precursors of AI adoption in business: Towards an efficient decision-making and functional performance", *International Journal of Information Management*, Vol. 75, pp. 1-26. https://doi.org/10.1016/j.ijinfomgt.2023.102745

Borges, A. F. S., Laurindo, F. J. B., Spínola, M. M., Gonçalves, R. F. and Mattos, C. A. (2020), "The strategic use of artificial intelligence in the digital era: Systematic literature review and future research directions", *International Journal of Information Management*, Vol. 57 No. 1, pp. 1-16. https://doi.org/10.1016/j.ijinfomgt.2020.102225

Brauner, P., Hick, A., Philipsen, R. and Ziefle, M. (2023), "What does the public think about artificial intelligence?—A criticality map to understand bias in the public perception of AI", *Frontiers in Computer Science*, Vol. 5, pp. 1-12. https://doi.org/10.3389/fcomp.2023.1113903

Corporate Communications: an International Journal

Brockhaus, J., Buhmann, A. and Zerfass, A. (2023), "Digitalization in corporate communications: understanding the emergence and consequences of CommTech and digital infrastructure", *Corporate Communications: An International Journal*, Vol. 28 No. 2, pp. 274-292. https://doi.org/10.1108/ccij-03-2022-0035

Buhmann, A (2023), "The implications of artificial intelligence for strategic and organisational communication", *Communication & Organisation*, Vol. 64 No. 2, pp. 218-218. https://doi.org/10.4000/communicationorganisation/13066

Buhmann, A. and Fieseler C. (2023), "Deep learning meets deep democracy: Deliberative governance and the responsible innovation of artificial intelligence", Business Ethics Quarterly, Vol. 33 No. 1, pp. 146-179. https://doi.org/10.1017/beq.2021.42

Buhmann, A. and Gregory, A. (2023), "Artificial intelligence: Implications for corporate communication roles and responsibilities", Luoma-aho, V. and Badham, M. (Ed.s.), *Handbook of digital corporate communication*, Edward Elgar Publishing, Cheltenham, pp. 281-296.

Buhmann, A. and White, C. L. (2022), "Artificial intelligence in public relations: Role and implications", Lipschultz, J. H., Freberg, K. and Luttrell R. (Ed.s.), The *Emerald handbook of computer-mediated communication and social media*, Emerald Publishing, Bingley, pp. 625-638. https://doi.org/10.1108/978-1-80071-597-420221036

Cardinale, I. (2018), "Beyond constraining and enabling: Toward new microfoundations for institutional theory", *Academy of Management Review*, Vol. 43 No. 1, pp. 132-155. https://doi.org/10.5465/amr.2015.0020

Carolus, A., Augustin, Y., Markus, A. and Wienrich, C. (2022), "Digital interaction literacy model – Conceptualizing competencies for literate interactions with voice-based AI

Corporate Communications: an International Journal

systems", *Computers and Education: Artificial Intelligence*, Vol. 4, pp. 1-9. https://doi.org/10.1016/j.caeai.2022.100114

Davis, F. D. (1985), *A technology acceptance model for empirically testing new end-user information systems: Theory and results*, Massachusetts Institute of Technology, Cambridge, MA.

DeLone, W. H. and McLean, E. R. (1992), "Information systems success: The quest for the dependent variable", *Information Systems Research*, Vol. 3 No. 1, pp. 60-95. https://doi.org/10.1287/isre.3.1.60

DiMaggio, P. J. and Powell, W. W. (1983), "The iron cage revisited. Institutional isomorphism and collective rationality in organizational fields", *American Sociological Review*, Vol. 48 No. 2, pp. 147-160.

Fishbein, M. (1980), "Theory of reasoned action: Some applications and implications", Howe, H. and Page, M. (Ed.s.), *Nebraska symposium on motivation 1979*, University of Nebraska Press, Lincoln, NE, pp. 65-116.

Galloway, C. and Swiatek, L. (2018), "Public relations and artificial intelligence: It's not (just) about robots", *Public Relations Review*, Vol. 44 No. 5, pp. 734-740. https://doi.org/10.1016/j.pubrev.2018.10.008

Gong, C. and Ribiere, V. (2020), "Developing a unified definition of digital transformation", *Technovation*, Vol. 102, pp. 1-17. https://doi.org/10.1016/j.technovation.2020.102217

Goodhue, D. L. and Thompson, R. L. (1995), "Task-technology fit and individual performance", *MIS Quarterly*, Vol. 19 No. 2, pp. 213-236. https://doi.org/10.2307/249689

Corporate Communications: an International Journal

Guzman, A. L. and Lewis, S. C. (2020), "Artificial intelligence and communication: A human–machine communication research agenda", *New Media & Society*, Vol. 22 No,. 1, pp. 70-86. https://doi.org/10.1177/1461444819858691

Hancock, J. T., Naaman, M. and Levy, K. (2020), "AI-mediated communication: Definition, research agenda, and ethical considerations", *Journal of Computer-Mediated Communication*, Vol. 25 No. 1, pp. 89-100. https://doi.org/10.1093/jcmc/zmz022

Hasija, A. and Esper, T. L. (2022), "In artificial intelligence (AI) we trust: A qualitative investigation of AI technology acceptance", *Journal of Business Logistics*, Vol. 43 No. 3, pp. 388-412. https://doi.org/10.1111/jbl.12301

Iaia, L., Nespoli, C., Vicentini, F., Pironti, M. and Genovino, C. (2024), "Supporting the implementation of AI in business communication: the role of knowledge management", *Journal of Knowledge Management*, Vol. 28 No. 1, pp. 85-95. https://doi.org/10.1108/JKM-12-2022-0944

Johnson, D. G. and Verdicchio, M. (2017), "AI anxiety", *Journal of the Association for Information Science and Technology*, Vol. 68 No. 9), pp. 2267-2270. https://doi.org/10.1002/asi.23867

Kanbach, D. K., Heiduk, L., Blueher, G., Schreiter, M. and Lahmann, A. (2024), "The GenAI is out of the bottle: Generative artificial intelligence from a business model innovation perspective", *Review of Managerial Science*, Vol. 18 No. 4, pp. 1189–1220. https://doi.org/10.1007/s11846-023-00696-z

Kurup, S. and Gupta, V. (2022). "Factors influencing the AI adoption in organizations", *Metamorphosis: A Journal of Management Research*, Vol. 21 No. 2, pp. 129-139. https://doi.org/10.1177/09726225221124035

Corporate Communications: an International Journal

Neumann, O., Guirguis, K. and Steiner, R. (2024), "Exploring artificial intelligence adoption in public organizations: A comparative case study", *Public Management Review*, Vol. 26 No. 1, pp. 114-141. https://doi.org/10.1080/14719037.2022.2048685

Panda, G., Upadhyay, A. K. and Khandelwal, K. (2019), "Artificial intelligence: A strategic disruption in public relations", *Journal of Creative Communications*, Vol. 14 No. 3, pp. 196-213. https://doi.org/10.1177/0973258619866585

Polisetty, A., Chakraborty, D., G, S., Kar, A. K. and Pahari, S. (2024), "What determines AI adoption in companies? Mixed-method evidence", *Journal of Computer Information Systems*, Vol. 64 No. 3, pp. 370-387. https://doi.org/10.1080/08874417.2023.2219668

Rogers, E. M. (1962), *Diffusion of innovations*, Free Pres, New York, NY.

Sartori, L. and Bocca, G. (2023), "Minding the gap(s): Public perceptions of AI and socio-technical imaginaries", *AI & Society*, Vol. 38, pp. 443-458. https://doi.org/10.1007/s00146-022-01422-1

Seidenglanz, R. and Baier, M. (2023), "The impact of artificial intelligence on the professional field of public relations/communications management: Ethical issues, challenges and an attempt at a forecast", Adi, A. (Ed.), *Artificial intelligence in public relations and communications: Cases, reflections and predictions*, Quadriga University of Applied Sciences, Berlin, pp. 124-136.

Trist, E. L. and Bamforth, K. W. (1951), "Some social and psychological consequences of the Longwall method of coal-getting: An examination of the psychological situation and defences of a work group in relation to the social structure and technological content of the work system", *Human Relations*, Vol. 4 No. 1, pp. 3-38. https://doi.org/10.1177/001872675100400101

Corporate Communications: an International Journal

Uren, V. and Edwards, J. S. (2023), "Technology readiness and the organizational journey towards AI adoption: An empirical study", *International Journal of Information Management*, Vol. 68, pp. 1-12. https://doi.org/10.1016/j.ijinfomgt.2022.102588

Venkatesh, V. and Bala, H. (2008), "Technology acceptance model 3 and a research agenda on interventions", *Decision Sciences*, Vol. 39 No. 2, pp. 273-315. https://doi.org/10.1111/j.1540-5915.2008.00192.x

Venkatesh, V. and Davis, F. D. (2000), "A theoretical extension of the technology acceptance model: Four longitudinal field studies", *Management Science*, Vol. 46 No. 2, pp. 186-204. https://doi.org/10.1287/mnsc.46.2.186.11926

Venkatesh, V., Morris, M. G., Davis, G. B. and Davis, F. D. (2003). User acceptance of information technology: Toward a unified view, *MIS Quarterly*, Vol. 27 No. 3, pp. 425-478. https://doi.org/10.2307/30036540

Yigitcanlar, T., Agdas, D. and Degirmenci, K. (2023), "Artificial intelligence in local governments: Perceptions of city managers on prospects, constraints and choices", *AI & Society*, Vol. 38, pp. 1135-1150. https://doi.org/10.1007/s00146-022-01450-x

Zerfass, A., Hagelstein, J. and Tench, R. (2020), "Artificial intelligence in communication management: A cross-national study on adoption and knowledge, impact, challenges and risks", *Journal of Communication Management*, Vol. 24 No. 4, pp. 377-389. https://doi.org/10.1108/JCOM-10-2019-0137

Zerfass, A., Verčič, D., Verhoeven, P., Moreno, A. and Tench, R. (2019), *European Communication Monitor 2019. Exploring trust in the profession, transparency, artificial intelligence and new content strategies. Results of a survey in 46 countries*, EUPRERA/EACD, Brussels.

Corporate Communications: an International Journal

Zucker, L. G. and Schilke, O. (2019), "Towards a theory of micro-institutional processes: Forgotten roots, links to social-psychological research, and new ideas", Haack, P., Sieweke, J. and Wessel, L. (Ed.s), *Microfoundations of institutions*, Emerald Publishing, Leeds, pp. 371-389. https://doi.org/10.1108/S0733-558X2019000065B029

Corporate Communications: an International Journal

Theory/model	Author(s)	Scope and relevant factors
Technology acceptance model (TAM)	Davis, 1985	TAM posits that perceived ease of use and perceived usefulness determine an individual's intention to use a technology—which, in turn, affects actual usage.
Technology acceptance model (TAM2)	Venkatesh and Davis, 2000	TAM2 extends TAM by including social influence processes (subjective norm, experience, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, and result demonstrability) to explain perceived usefulness and usage intentions.
Technology acceptance model (TAM3)	Venkatesh and Bala, 2008	TAM3 integrates the factors from TAM2 with additional factors such as computer self-efficacy, perception of external control, computer anxiety, computer playfulness, perceived enjoyment, and objective usability.
Unified theory of acceptance and use of technology (UTAUT)	Venkatesh *et al.*, 2003	UTAUT integrates elements from various models to explain user intentions and behavior regarding technology adoption, emphasizing performance expectancy, effort expectancy, social influence, and facilitating conditions.
Information systems success model (ISSM)	DeLone and McLean, 1992	ISSM assesses the success of information systems through six dimensions: system quality, information quality, service quality, use, user satisfaction, and net benefits.
Diffusion of innovation (DOI)	Rogers, 1962	DOI theory explains how, why, and at what rate innovations spread, focusing on the innovation itself, communication channels, time, and social system.
Task-technology fit (TTF)	Goodhue and Thompson, 1995	TTF proposes that technology adoption and performance improve when the capabilities of the technology match the tasks that users need to perform, emphasizing task characteristics, technology characteristics, task-technology fit, utilization, and performance impact.
Socio-technical systems theory (STS)	Trist and Bamforth, 1951	STS emphasizes the interrelatedness of social and technical aspects of an organization, advocating for the relevance of structure (organization), people (cognitive and social factors), physical system (hardware, software, facilities), and tasks (work).

Corporate Communications: an International Journal

ID	Group	Company	Expert gender
E1	Consultancy	UNICEPTA	M
E2	Developer	IBM Germany	F
E3	Developer	Robert Bosch	M
E4	Consultancy	AITASTIC Research & Consult	M
E5	Developer	Microsoft Corporation	M
E6	Developer	Deutsche Telekom Business Solutions	M
E7	User	Schott	F
E8	Consultancy	Anonymous Agency	F
E9	Developer	GfK	F
E10	User	PricewaterhouserCoopers	M
E11	User	Anonymous Software Company	M
E12	User	pressrelations	M
E13	User	Audi	M
E14	Developer	Palantir Technologies	M
E15	Consultancy	CISION	M
E16	User	Fraport	M
E17	Developer	eBay Germany	M
E18	Developer	Anonymous online shop	F
E19	Developer	Siemens	F

Corporate Communications: an International Journal

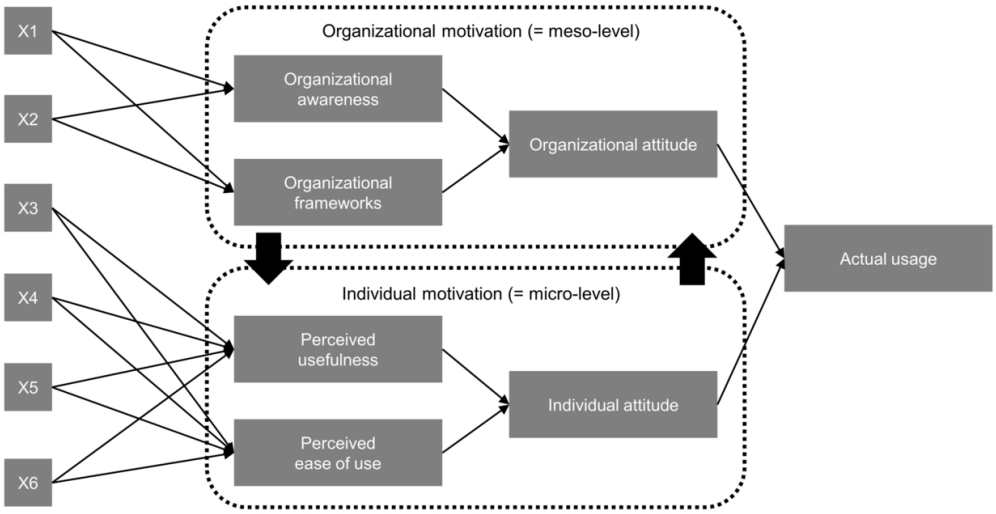

Figure 1: Extended TAM integrating micro- and meso-level determinants of AI acceptance (Source: own figure)

209x108mm (150 x 150 DPI)