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# Artificial Intelligence: Implications for Corporate Communication Roles and Responsibilities

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## Abstract

This chapter discusses the use in practice and implications of AI for professional roles and responsibilities in corporate communication. It defines AI and other relevant terms, gives a brief overview of how it is currently being used and outlines some of the newer applications such as Intelligent User Interfaces. It goes on to explore what current and future developments mean for the structure of the profession, including how the role will be re-shaped as many of the operational tasks in corporate communication are automated and ‘infused’ with AI. It considers how the role can become more strategic as it moves away from the operational, focussing on ethical concerns as a route to an enhanced governance role. The chapter envisages an active ethical guardian role for corporate communicators at an organisational level as well as in the function, serving as the conscience of the wider organisation. It concludes by providing a brief case study on Vodafone, showcasing a progressive positioning AI policies.

**Key words:** Artificial intelligence, AI, big data, ethics, professional roles, governance.

## Introduction

Artificial intelligence (AI) has been defined in many ways. One of the most widely used definitions goes back to the original coining of the term in the 1950s, as a machine’s ability to produce results for a task comparable to the results achieved by a human agent (Corea, 2019). Today, computerized algorithms and the availability and collation of vast and distributed data enables AI systems to increasingly automate operations and decisions that have previously been left to human actors, e.g., based on Computer Vision, Neural Networks, or Natural Language Processing (Chui et al., 2018). The

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ability of AI systems to identify undiscovered patterns in big data and in real time is an enhancement that adds new dimensions to aid human decision-making.

There have been copious papers on the development of interactive websites and specifically on social media related topics, but relatively little on the specific topic of AI and its implications for Corporate Communication. Recent surveys suggest that most communication professionals believe they need more education about and guidance on the use of AI for communication practices (Virmani & Gregory, 2021) and a majority also agree that AI will have great impact in the very near future – for communication practices and beyond (Zerfass et al., 2020). In addition to grappling with the ever-evolving technologies that are used for corporate communication tasks, it is thus important to consider the impacts and implications of the use of AI not just ‘within’ communications but more generally by the organizations for which communicators work.

In this chapter, we will present the state of discussion on the implications of AI for professional roles and responsibilities in corporate communication. We will provide context and define AI and other relevant terms in use, give a brief overview of how AI is currently being used in the practice and characterize new ‘horizons’ of application. Further, we will explore what these developments mean for the structure of the profession and, within this, will focus on issues of governance and the ethical guardian role for corporate communicators, serving as the conscience of the wider organisation.

### **Artificial intelligence: key terms and concepts**

AI embraces a variety of computing technologies resembling human intelligence (Wang, 2019). It can range from expert systems which are applications that make decisions based on complex rules or if/then logic, to applications that can emulate the common sense, free will and emotions of human beings. Machine learning is a subset of AI. Programmes learn by reprogramming themselves as they assimilate more data and can then perform specified tasks with increasing accuracy. Machine learning technologies include natural language processing which can process text and speech in real-time, machine vision that can comprehend and differentiate visual inputs, predictive systems that can discern from patterns in data what is likely to happen, and search and information retrieval optimisation. Most machine learning based AI requires human intervention to correct the algorithms used, for example, if a calculation or input mistake is discovered.

Deep learning is a subset and more sophisticated version of machine learning where a computer teaches itself to perform a specific task with increasing accuracy, but it requires no human intervention. It picks up its own inconsistencies and corrects them and builds on the new information it has created. For example, with self-driving cars, deep learning is used to understand what an obstacle looks like without the algorithm having to be constantly re-programmed to recognise every possible obstacle.

Typical AI systems can involve relatively simple automation such as robots assembling dishwashers and running administrative systems, for example, customer-ordering requests. More sophisticated AI includes chatbots which can learn to engage in ‘conversations’, through to facial recognition systems to fulfil hotel check-in, to writing content along with selecting additional media, such as the appropriate sounds and images, to go with it.

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AI and big data often go together. Big data are data sets of a size or type that are beyond the capacity of traditional databases to capture, handle and process (De Mauro, Greco, & Grimaldi, 2016). Big data have three distinct characteristics: high volume, high velocity and high variety. Data can be structured (such as a log of all journeys made on a country's railway network) or unstructured (for example the content of all TikTok posts). Sources of data are becoming more complex and varied and include mobile devices, sensors, social media, the Internet of Things, video/audio, networks, log files, transactional applications and the output of AI itself. The *variety* of data from these sources can be extensive and much of it generated in real time (*velocity*) and at a very large scale (*volume*). AI applications often use big data to inform the algorithms that programme them. For example, by analysing thousands of hours of video footage, a driverless car can learn to recognise a dog or a cat and use that data to take decisions about evasive action in real time while taking other factors into account such as speed, safety of humans in and outside the car, road conditions, proximity of other traffic and so on.

### **Previous studies**

#### **Artificial intelligence, its reach and impact on corporate life**

The topic of big data and AI is a relatively new area of enquiry in the social sciences and humanities and therefore previous studies are limited. However, what has been recognised is that business (indeed all aspects of) life is not only being enabled by AI, but also enacted through it (Zuboff, 2019). All kinds of transactions are being conducted online using AI-based systems or informing AI applications through data. In many instances, there is no choice: from booking and buying airline seats to donating to charities or submitting tax returns, online is often the sole method of transaction. Life on-line entails engaging with big data platforms such as Google, Amazon and Facebook or other proprietary platforms owned by corporate organisations. The companies operating such platforms realised many years ago that their primary business was not the provision of services, but the collection of data (West, 2019). The data, analytics and AI sectors are huge business sectors. Big data and business analytics revenues are forecast to reach US\$ 512 billion in 2026, increasing from US\$ 171 in 2018 (Bloomberg, 2020) and the global AI market will be worth US\$ 228.3 billion by 2026 (Global Industry Analysts Inc., 2021). AI enabled data platforms are highly efficient in providing goods and services since they not only enact transactions effectively, efficiently and at speed with minimal human intervention hence reducing costs, but they can predict and prompt likely and future needs and thereby generate business. Traditional businesses have seen their own share of their market significantly impacted by the platform business, for example, hotels by Airbnb and transport by Uber. The Covid 19 pandemic has speeded up traditional businesses' adoption of AI and many now are going through a transformation into AI, data driven organisations.

There is, however, a darker side to the advance of AI has also been noted (West, 2019). Individuals have limited choice to opt out of using platforms if they wish to obtain the services and products they need. They have to accept the attendant relentless data collection that transactions involve, including of highly personal so that data collectors can identify interests and motivations and predict current and future choices (Nunan & DiDomenico, 2013). At the same time, individuals' ability to deny the aggregation of their data with that of others is limited and, in many instances, they are powerless in preventing that data being used for other purposes that they would object to if they had knowledge of that use. Human agency is being profoundly affected by the apparently unstoppable march of these technologies (Bourne, 2019).

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At the corporate level, as hinted at above, the use of AI is profoundly affecting working practices with automation and AI now beginning to take over the more repetitive tasks and the disintermediation of the supply chain means that many of the ‘middle man’ businesses, such as high street shops are being squeezed. In a report covering the acceleration to AI driven by the need to review working practices during the 2020/2021 Covid pandemic, McKinsey (2021) foresee that over 100 million workers in the eight countries in their study, that is 1 in 16 workers, may need to switch to a different occupation to remain employed.

### **The state of AI in digital corporate communication**

Within corporate communication research and related fields, studies on AI are again limited, yet their number is quickly increasing. A few works explore the overall reach and potential impacts of AI on corporate communication (Buhmann & White, 2022; Zeffass, Hagelstein & Tench 2020; Galloway & Swiatek 2018), big data and AI ethical concerns (White & Boatwright, 2020; Buhmann, Paßmann, & Fieseler, 2020; Gregory & Halff 2020, Bourne, 2019), and tools enabled by advanced machine learning, for example, chatbots (Murtarelli, Gregory & Romenti 2020). However, overall the literature on AI is still limited. In contrast, there is an active discussion about AI in the professional literature, i.e., from the corporate communication think tanks and professional associations. The Page Society, based in the US and representing Board level corporate communication practitioners, produced a report in 2019 (Page, 2019) which made a plea for the profession to upskill in digital technologies as it was falling behind other communicative disciplines such as marketing. The Institute for Public Relations, also US-based, has produced several articles on AI and has a specialist digital media research centre producing a range of resources and commentaries. Most active has been the UK-based Chartered Institute of Public Relations (CIPR), which constituted its ‘AIinPR’ expert panel in 2018 and who have produced numerous research reports, guides and practical implementation tool kits (see [https://cipr.co.uk/CIPR/Our\\_work/Policy/AI\\_in\\_PR.aspx](https://cipr.co.uk/CIPR/Our_work/Policy/AI_in_PR.aspx))

The CIPR commissioned “The AI and Big Data Readiness Report” which explores the state of ‘readiness’ in the public relations profession (Virmani & Gregory, 2021). It shows a varied picture: some advanced practice and senior practitioners being involved in decision-making on AI in the practice and more widely in organisations, with others not yet on the ‘AI journey’ and believing it not relevant or not knowing where to start. The greatest fear revealed by the survey is about loss of jobs and the supplanting of corporate communications activities by AI, particularly at the tactical level (writing, audience selection and targeting, monitoring and evaluation etc.). Also noted in the survey underpinning the research was the general lack of knowledge about technical aspects of AI with 43% of respondents believing they had limited knowledge and lacked confidence in using AI in their work. It is understandable therefore that the CIPR, (2020) claimed “the profession is sleep-walking into AI”. Very little is articulated on an ‘expanded role’ related to AI, particularly in governance, but awareness of ethical issues is apparent. Only 5% thought governance was a skill believed to be most relevant as a communication practitioner currently, but 18% thought ethics was the top challenge for professionals when it comes to implementing AI across an enterprise. This suggests an increasing appreciation that AI governance is relevant to corporate communications and organisationally, but practitioners are not yet clear about what is involved or how to undertake it.

Other research commissioned by the CIPR (Valin, 2018) examined the level of permeation of AI in the profession and predicted that by 2023, two thirds of activities would be AI assisted (see Figure 1).

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Recent consideration on this by its “AIinPR” Panel has concluded that this process was accelerated by the Covid 2021 pandemic and that this position has already been achieved.

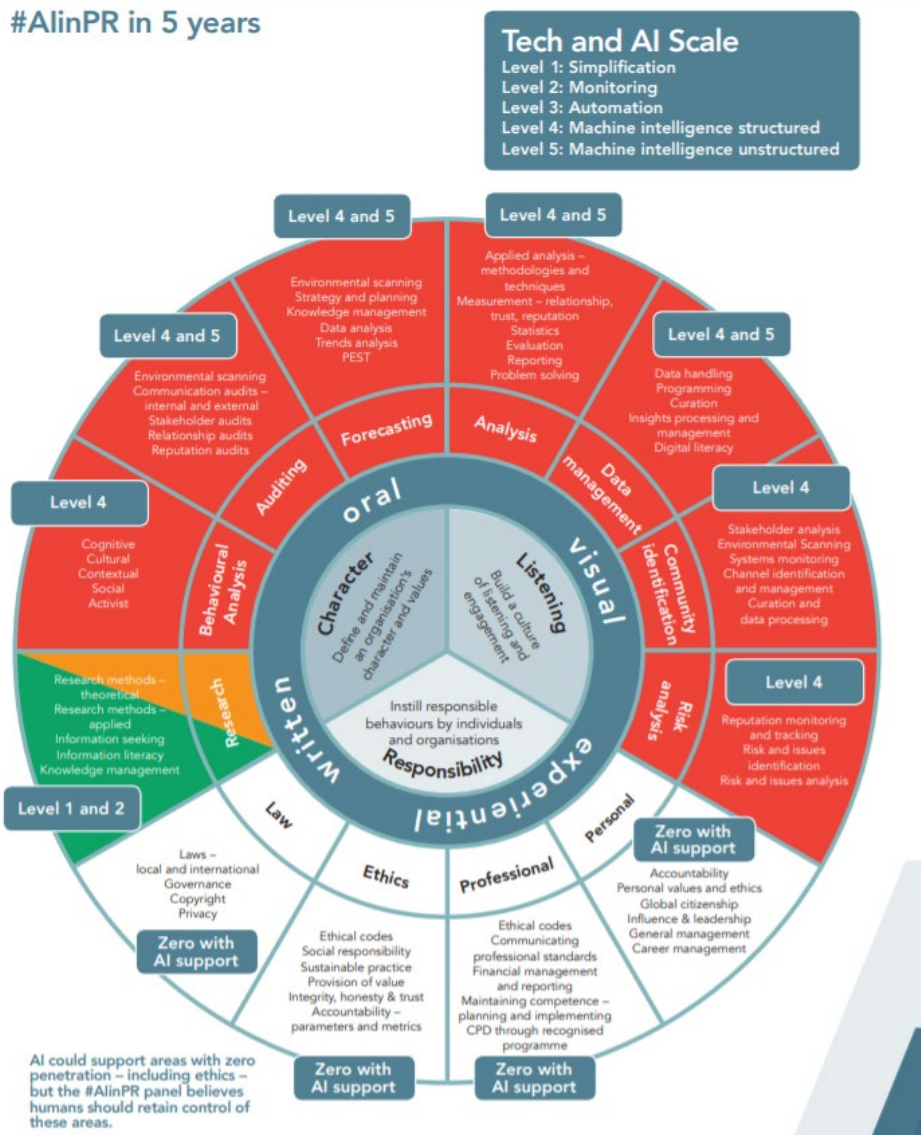


Figure 1. Predicted Level of AI penetration into the profession by 2023: mapping the 50 skills identified in the Global Alliance Global Body of Knowledge (GBOK) with AI. (Taken from Valin, 2018, p. 10),

The research concluded that the majority of the ‘doing’ parts of the public relations role were susceptible to automation and AI tools, however, Valin asserted that,

“Regardless of the tasks and skills that can be automated or benefit from AI, human intervention in editing, sensitivity, emotional intelligence, applying good judgement and ethics will always be needed.” (p. 11)

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A look at some of the industry leader commentary and propriety commercial offerings demonstrates how AI has infused every aspect of corporate communication work (see, for example, see the PR tool stack proposed by Wadds Inc., 2021. From research to stakeholder identification and selection, to identifying stakeholder channel use and optimising channel selection; content design and creation, including writing, image and audio generation; monitoring (including social listening) and evaluation; programme implementation and management and work flow optimisation - there are automation and AI tools that will do the task faster and more accurately than humans. Even the most human part – the actual engagement – is now beginning to be handled well and intelligently (and with permanent collection, storage, analysis and aggregation of data) by AI-based systems such as chatbots and virtual reality applications.

### **What is changing?**

Many new applications and innovations are emerging on a daily basis, but one area that is developing rapidly is Intelligent User Interfaces (IUIs) which have AI at their core. IUIs seek to make the interface between machines (computers) and humans as easy as possible, and their main feature is that they attempt to emulate a human-to-human experience, including the sensory. Moore and Hübscher (2021) have written specifically on the uses and impact of these devices on corporate communication and they are far reaching. They claim that these intelligent interfaces “become interpreters and then arbiters of content, choices, and identities because they will be the faces of organisations (p 4)”. IUI technology includes virtual and augmented reality, chatbots, virtual assistants, avatars, indeed, all applications that incorporate at least one sensory element, such as sight, sound (speech) or touch. In AR and VR applications, sight is a key element, either providing a visual experience or engaging the sight of the user. A particular powerful technology is eye-tracking devices, which open up opportunities to help the visually impaired, but also give new insight into visual preferences, behaviours and obsessions. Touch technologies can be integrated into just about any object from tables and walls to clothes and skin. In their book, Moore recounts shaking the hand of a dead trades unionist virtually and having a tactile experience.

The potency of these technologies for corporate communication cannot be overestimated in three ways: first gaining insight into people’s ways of thinking – both rational and emotional –, their motivations, preferences, choices, and ways of communicating (they provide access to the ‘deepest’ private thinking of individuals); second, this information opens up the potential for manipulation, without the individual realizing it; and third the further blurring of reality and the unreal. These issues are already apparent in the realm of social media: they will become even more apparent in IUI.

### **The impact of IUI’s in digital corporate communication**

There are a number of features of IUIs that merit further examination. For example, these devices can be brought home and incorporated into the fabric of life, where they can see, listen and physically interact. They can enhance lives by taking on mundane tasks and predicting needs. They also constantly collect data and build rich pictures of individuals’ and community lives. They can offer hyper-personalization and drill down to deliver provide audiences of one and messages to, or conversations with, one. These conversations will be increasingly nuanced, emotionally intelligent, extended, particular and unscripted. They offer the opportunity of data-collecting dialogue at the granular level of one to one to those who have the resources to harness their power - corporate communicators.

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IUIs will gain increasingly sophisticated emotional attributes and be able to gauge, respond to and even show it: they already have to some extent - note the use of robot comfort dogs for the lonely and people with emotional and dementia conditions. The car industry is working on user interfaces that detect driver anger. There is potential for corporate communications to build emotionally resonant brands or to generate close emotional affinity with products using these interfaces. There are even suggestions that these IUI's will, in time, integrate with the human nervous system. As Moore and Hübscher (2021) point out, emotional engagement and affinity has close connections with trust-building, a core tenet of corporate communication and a key aspect of intangible asset building. Emotions, trust and loyalty also drive consumption, so has a direct link to the bottom-line.

Two further characteristics of IUIs merit consideration. First the increasing naturalness of their language. As Murtarelli et al (2021) point out, there is a qualitative difference between a 'conversation' or what they call 'para conversations' with an AI agent, and reading text. In conversations meaning is created, relationships develop and trust is cultivated in a deep way, especially if these conversations are re-enforced by other sensory elements such as touch and vision. However, these are not conversations. AI agents are programmed to be purposive and data gathering whether that be for altruistic and or instrumental reasons. They listen and record as well as speak, and as they become more sophisticated and able to be more human-like, they will be able to elicit more and more personal information, knowing more about their human counterparts than they know about themselves. This prompts questions about boundaries and power. Should there be limits put on the amount AI communication devices should be allowed to know about individuals? Should there be boundaries put on how they can use the information they gather? These are pertinent questions for corporate communication because with this knowledge comes a power that can be used for collaboration and complementary activities, or to lead, persuade and manipulate without the subjects' informed consent.

Second, the humanization of AI is progressing apace. Robots are mirroring human movement, have skin-like coverings, can mimic human physical and emotional reactions: will walk like humans, talk like humans, look like humans, act like humans. They will be able to supplant even the human presence of corporate communication professionals at meetings, events, in off and on-line conversations as well as helping them (or replacing them) in every activity they undertake. If AI is permeating every area of corporate communications by providing tools for *operational* activity, what is its impact on the more strategic elements of work? These may include, as the research by Valin (2018) presaged, understanding context, aligning organisations with societal expectations and securing legitimacy, developing purpose and brand, negotiating values, creating meaning with stakeholders, making judgements about their reasonable and unreasonable expectations and how to deal with these and, developing organizational culture and character. It is clear that AI will be embedded in decision-making, providing the data upon which decisions can be made and in many cases, offering options based on the data. AI processes will undertake and analyse the research on all the areas outlined above, predict outcomes based on a range of scenarios, advise on best-choices (on parameters set by corporate communication) and monitor progress, advising on any adjustment along the way.

### **What remains the same?**

The question about what remains the same is a mute one. In many ways, nothing remains the same. It was Klaus Schwab of the World Economic Forum who coined the phrase 'the fourth industrial

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revolution’ (Schwab, 2018), and as Weiner & Kocher (2016) claim, the advance of Big Data and AI is irreversible. The introduction of Big Data and AI is, to use the much used and abused phrase, a paradigm shift. Its introduction to corporate communication is no less seismic; it will change society, organizations, the nature of work – including that in corporate communication and the potential outcomes.

The Valin (2018) research and the forgoing discussion hint at the fact that the most human elements of understanding context, nuance, what creating meaning entails, empathy, sympathy, judgement, integrity and the self-limitations of power will remain. Questions on the boundaries of AI and big data use and its governance will become more important, but it was ever thus. Humans have always struggled with the nature of machine/human interfaces and what this means for the human condition - right from the invention of primitive tools to the printing press, industrial machines and the introduction of modern computers. The core challenge is ‘just because we can, should we?’ This then leads to deeper considerations of the concerns that these new technologies raise.

### Critical Examination

The above discussion poses a number of crucial questions: what is known about AI? How transparent are the programming parameters and the algorithms? What can be done about potential mistakes and biases in algorithms? What about the imbalances in power between the owners, users and targets of AI? How much data should be collected and how should it be used? What voluntary and regulatory boundaries should be in place? These questions lead us on to a discussion about the emergent concerns that AI raises for corporate reputation and responsibility.

Both for AI developers as well as organizations applying these systems, AI may raise three interrelated ethical and reputational concerns—see Buhmann et al. (2020) and Buhmann and Fieseler (2022) for a deeper discussion of these. First, AI may raise *evidence concerns*, i.e., concerns about how systems turn vast data into ‘insights’ as the basis for (potentially flawed) decisions, recommendations etc. This process may raise concerns because the ‘insights’ a system applies for guiding its actions may be based on inconclusive evidence from patterns that are artefacts of vast data or from inferences based simply on correlations in big datasets. Further, evidence can be misguided through inadequate inputs, such as incomplete, sensitive, or incorrect data. In sum, evidence concerns can arise though unintended or intended flaws in data and or in the way data is processed.

Second, AI can raise *outcome concerns*, i.e., about systems decisions causing harm (potentially because of incomplete or inconclusive evidence). Such harm can come in the forms of immediate and direct effects or as latent and long-term consequences of AI application. Among immediate unfair outcomes are, e.g., bias and discrimination against race or gender to the detriment of diversity and inclusion. Indirect and long-term impacts can include technological unemployment or reinforcing people’s socialization within closed epistemic networks on social media, such as ‘filter bubbles’ (Nguyen, 2020).

Third, and most importantly for communicators, AI may raise *epistemic concerns*. These concerns are also discussed under labels such as ‘AI as black box’, ‘AI opacity’ or AI explicability’. This refers not only to deliberate efforts to keep algorithms secret (often out of strategic necessity around proprietary systems and data), but to the often inevitable difficulty of forecasting or reconstructing how a system



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processes data inputs for decision-making or how these decision affect a domain of AI application in the long-term. The potentially inscrutable inputs and opaque algorithmic data processing as well as often untraceable harmful impacts, are a significant concern with AI. The vast sets of data used by AI, their fluid way of processing data and their ability to evolve their own algorithms may not allow for any explainable relationship between data and a system's decisions or actions. This can make it impossible to trace if and how a system may pick up 'ethically relevant' information from their training data and incorporate them within their own design. As such, epistemic concern raise significant challenges for communicators charged with explaining the conduct of organizations that develop or employ AI.

### **The pivotal role of 'epistemic concerns' with AI and how they challenge organizational legitimation**

The above discussion shows that the proliferation of AI matters to communicators way beyond the level of new tools for communication. Significant challenges also emerge though increased AI use in organizational processes more generally. Epistemic challenges in particular raise issues for communicators' efforts to explain organizational conduct and position the organization as an appropriate and socially responsible actor. Some epistemic concerns—for instance those that come with a strategic necessity to obfuscate (e.g., for reasons of functionality, competitiveness, or data privacy), can be addressed through standard accountability frameworks to align organizational conduct and social expectations. Other epistemic concerns, however, cause fundamental issues for explainability, e.g., those related to traceable long-term negative social consequences of AI application. The ability of standard regulation to address these challenges are limited, as evidenced, in the discussion around the General Data Protection Regulation, GDPR, and 'fair AI' (Butterworth, 2018). The accountable AI and AI governance discussion goes beyond the scope of GDPR and other standard frameworks for data production and use. Throughout the iterative AI development process, even software engineers, who may reuse and repurpose code from libraries, often refer to parts of their work as 'black boxes' (Mittelstadt et al., 2016). With this comes, not just for everyday users but also for experts and the organizations that develop and apply AI systems, uncertainty about the use of potentially sensitive variables such as race and gender; latent and long-term impacts including those who work and those who do not; responsibility for decisions across vast networks of human and non-human agents; the embodied norms and values within systems on, for example, ethical issues. Such concerns, which aren't easily solved by standardized forms of explanation and accountability (such as in reporting guidelines), call for the special attention of communication practitioners, who are charged with explaining organizational conduct and managing an organization's legitimacy and reputation.

In principle, legitimation – i.e., the process of keeping an organization accountable and positioning it as an accepted and responsible social actor (Boyd, 2020) – can happen based on three strategic options (Scherer et al., 2013): via a *manipulative approach* (where communicators make an active attempt to shape external expectations in favour and support of organizational conduct), via an *adaptive approach* (where organizations monitor external expectations, rules, and regulations in their environment and work towards compliance), or via a *discursive approach* (where organizations and stakeholders engage in moral discourse to jointly develop an understanding of challenges as well as desirable solutions). The first two strategic options necessitate a relative degree of certainty, either on the side of the organization (as a basis for successful manipulation) or on the side of stakeholders (as a basis for successful adaptation). For achieving legitimation around highly fluid and poorly transparent

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systems, however, where certainty on both sides is low (i.e., to both expert AI developers and ordinary end users), corporate communicators need to support the facilitation of a discursive engagement processes between all parties to jointly deliberate and decide on good practices for responsible and accountable AI.

### **Tackling ‘epistemic concerns’: facilitating discursive engagement for responsible AI**

To enable engagement processes for responsible AI, communicators can follow a framework of three basic strategies that help facilitate stakeholder discourse (cf. Buhmann et al., 2020). First, communicators can focus on providing *access* to an inclusive and continuous debate where all those potentially affected by the processes and decisions of an AI system have equal opportunity participate and spotlight potential issues and concerns. For instance, news organizations, such as BuzzFeed, maintain repositories in which data and code used for data-driven articles are at least partially published. Media outlets, such as The New York Times, upload the datasets they use to feed their machine learning algorithms to GitHub. These platforms, through commenting functions and forums, may offer opportunities for stakeholders to engage.

However, merely providing access does not ensure that discourse participants understand a relevant issue and are able to deliberate. As a second strategy, communicators can make efforts to go beyond merely providing information about systems to helping facilitate real *comprehension*. This may be supported through experiment databases that enable comparisons between different algorithms, methods of simplifying machine-learning models by visualizing their actions, or by developing alternative explanations for AI based on insights gathered through reverse engineering. Finally, as an alternative to reverse engineering whole systems, there are approaches available for generating information by focusing on actual use scenarios in algorithm audits (cf. Sandvig et al., 2014). Here communicators can help tell relatable stories via a realistic case that simulate or follow actual algorithm users to trace, for example, how AI may discriminate.

Finally, communicators can play a role in ensuring that efforts to facilitate access and comprehension can form the basis for an open debate and *deliberation* where participants get the opportunity to see issues from all relevant points of view and can jointly develop acceptable and legitimate solutions for AI systems. To facilitate such open argumentation, communicators should include and empower diverse voices, even of those parties who may not be aware that they are suffering negative outcomes. This is, of course, also important because if stakeholders become aware that proprietors of AI systems have made no efforts to reveal critical ‘unknowns’ about their approaches, this can yield adverse reputational ramifications.

In sum, the above strategies compel corporate communicators to place a strong emphasis on involving and empowering stakeholders. This is especially important where there are strong epistemic concerns and AI developers and applicants of AI may themselves not have all information necessary to validly assess a system and its potential issues—and hence all parties involved may profit from open and mutual discourse to help make sound decisions and avoid harm. True discursive stakeholder engagement, however, is a challenging task. But it does not have to mean involving everyone in the same way and at the same time. Recent work on stakeholder discourse shows how such engagement may be approached as a “distributed process” made up of several instances and venues with different stakeholders (experts, policy makers, laypersons etc.) that may have different needs and demands for comprehending and discussing AI (cf. Buhmann & Fieseler, 2022).

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## Implications

The level at which AI is now embedded in the practice of corporate communication means there will be significant changes and challenges in the operational and strategic role of corporate communicators.

At the operational level, in theory at least, most of the routine tasks, of which there are many in corporate communication (planning, audience identification and selection, content design and delivery, monitoring and evaluation) are amenable to automation and AI applications (see Figure 1). There are new knowledge and skills sets that need to be learned, such as knowledge of the various AI applications and their deployment, including the best combination of AI tools to use; acquisition of new technical skills to operate these applications; familiarity with the use and interpretation of data and knowledge of the best combination of human and AI resources and their respective roles. This will demand a level of data and technical literacy far above that which has been typically required of practitioners in a profession where creativity has often been the most prized attribute.

Beyond these knowledge and skills requirements needed for the operational practice, corporate communication as a specialist function will face the same sets of questions which apply to organisations as laid out above. As the operational is increasingly taken over by AI, the role of corporate communicators will shift much more into the governance of their own communication AI systems, processes and tools. This starts with an understanding of the technology and algorithms that go into them, including issues of explainability, bias and privacy and moves on to their uses and impacts. The precision of profiling and micro-targeting derived from big and personal data and the ability for precise and potentially manipulative messaging and content delivered in ever more sensory and emotionally resonant ways, requires careful reflection by individual practitioners and the wider profession. Agreement about the ethical boundaries of the practice and formal training in AI governance and ethics to maintain trust and confidence in communication work appears to be an imperative. Hence, monitoring and governance, knowing what AI is doing, how it is doing it and making the right interventions to ensure ethical practice, is essential to the future role.

The central role that corporate communication plays in stakeholder relationships and the preservation of the tangible and intangible assets of the organisation, points to a potential wider contribution that the function could play in AI governance. There is a huge amount in the public relations literature about the roles and responsibilities of practitioners (for example Dozier & Broom, 1995; Moss, Newman & DeSanto 2005; Gregory, 2008. Tench et al., 2013) usually wrapped up in discussions about the scope and remit of public relations work and arguments about its jurisdictional boundaries.

At the centre of all these discussions are claims about the roles of practitioners beyond the functional, particularly regarding broader organisational responsibility to society. This academic literature and professional publications point to the need for ethical practice and many refer to the role of the practitioner as ‘ethical guardian’: someone who serves as the conscience of the wider organisation. That this role is actually practiced is disputed (L’Etang, 2003), nonetheless, this chapter makes an argument for an expanded governance role for corporate communication as organisations are increasingly infused, driven and constituted by and through AI. This role requires ‘ethical guardian’ interventions in a whole range of areas.

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As noted in the introduction, organisations are transforming and the incorporation of AI into the whole organisation requires a holistic, non-technical perspective on the impact of this on intangible as well as tangible assets. This falls naturally within the Board advisory role of the corporate communication function.

AI and big data gives organisations choices about their physical location and over who, how and how many employees they recruit, retain and re-train. These are moral as well as economic choices and have reputational effects.

There are also issues about the interface between humans and AI and the nature of work. These can be posed as a moral question: who drives what? Do machines drive humans and human decision-making, or do humans place protocols and structures around machines to ensure that AI and big data assisted decision-making is controlled?

Then there are concerns around the nature of decision-making; when provided with what looks like compelling AI produced evidence it is important to ask questions about the integrity of the data, the transparency and programming of the algorithms that have interrogated it and the implications of decisions-made. That challenge is legitimately made by corporate communication professionals since they bear responsibility for communicating and defending these decisions. Crucial to this is their contribution to the understanding of context, including timing. Context is a factor that AI systems, as they currently stand, find difficult to appreciate. As options, opportunities and decisions are increasingly informed by AI systems, there is a crucial need for ‘someone’ to understand and interpret how they should be viewed in the light of wider societal trends, stakeholder needs and expectations and the more immediate contextual issues such as time, tone and place. Judgements need to be made not solely on the basis of logic. While contextual intelligence has always been within the remit of corporate communication, it becomes even more important when faced with AI informed, ‘scientific’ decisions.

The ethical guardian role extends to questions about how AI and big data systems are commissioned, implemented, and monitored. These include not just technical, but ethical questions about whether there are systems and processes in place to guarantee the privacy of user/customer data, proper control over how data is used and stored and transparency over what data is being collected, its use, with whom it is shared and aggregated in systems where AI is involved. The corporate communicator is the person often charged with communicating this information to interested stakeholders.

While there is guidance from some large transnational intuitions such as the European Union (2019) on how to implement AI organisationally in a responsible way, leaving these important questions to IT and technology specialists is not satisfactory. Corporate communication professionals need to be part of AI commissioning and build teams to pose tough ethical questions that may affect reputation, but may not occur to technical specialists who are focussed on operational issues. To discharge this ethical guardian role requires corporate communicators to acquire a robust understanding of AI, how these systems are designed and their uses and applications. It also requires courage to resist the relentless logic of AI and ‘scientific’ decision-making. These decisions are based on data, and this data is often from, about and affect people: people and society are more than atomised data parts and more than objects and targets.

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### **Case study: corporate communication and AI governance at Vodafone**

*This case study on AI governance is based on interviews with two senior policy and corporate communication executives from Vodafone and publicly available documents from the company and Global System for Mobile Communications (GSMA).*

Vodafone is a leading telecommunications company in Europe and Africa. It has mobile and fixed operations in 21 countries and partner networks in 52 more (as at 30 Sept 2021). Vodafone's purpose is to connect for a better future and that has underpinned its approach to AI. Vodafone has worked for the last few years to develop its own approach to managing the potential ethical issues with AI and now also partners in that approach with mobile industry body, the GSMA. At the time of writing, the GSMA AI for Impact taskforce is finalising its strategy on how AI can be used for positive impact, both commercially and socially. Vodafone is a significant player in shaping that strategy and believes it will be a 'playbook' for all members of the Association.

#### **AI Governance at Vodafone**

Vodafone openly recognises that AI governance is evolving and will develop and improve as the technology itself develops. As a member of GSMA, Vodafone is pushing for international legislation to ensure that issues such as privacy, human rights and diversity, and the principles of transparency and accountability are properly regulated, with those using AI systems being held to account. Since 2019, Vodafone has had a publicly available Artificial Intelligence Framework (see <https://www.vodafone.com/about-vodafone/how-we-operate/public-policy/policy-positions/artificial-intelligence-framework>) which sets out its principles for deploying AI in an ethical manner. Its key elements are:

- Transparency and accountability: customers and employees are informed when they communicate directly with AI systems
- Ethics and fairness: a commitment to the ethical development of AI
- Preservation of privacy and security: of all individuals who use their AI systems
- Human rights, diversity and inclusivity: respecting international human rights standards and best practice to ensure diversity, accessibility and inclusivity
- Maximising the benefits of AI while managing the disruption of its implementation: being a responsible employer and ensuring AI systems are human-centric.

Vodafone uses AI systems extensively, particularly in ensuring the smooth running of its networks, including traffic management. The approach to governance is that the AI Framework principles should be embedded throughout the company's processes and operations. Thus, within the company itself, the principles are, for example, embedded in product and service development teams so that privacy and security are designed in from the beginning, with any individual being able to raise concerns at any point. "What we want to avoid is go/no go decisions on products or services having to be constantly referred up to higher levels which creates bottlenecks and is disempowering." To facilitate this, there is systematic, mandatory training on AI and related topics such as inclusion and diversity from the point of employee induction onwards.

For complex and unique ethical cases - for example, questions/decisions about policy or principles and decisions with significant reputational implications - Vodafone has a number of steering committees that adjudicate according to the topic under consideration. These committees include

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executive directors and contributors from a range of backgrounds including legal counsel, subject matter experts and external affairs. “The important point here is that they are diverse teams and there is significant and sufficient human oversight of AI systems so that they are human-centric; the machines serve human beings, not the other way round.”

Vodafone is mainly a user of AI and procures services from developers. Throughout its supply chain it seeks to assure itself that its own ethical standards are adhered to. The company’s human rights team undertakes due diligence checks and suppliers report against, for example, the principles of privacy and transparency and again, human oversight of the performance of procured systems is regarded as crucial.

### **AI and corporate communication**

For corporate communication, the AI Framework is regarded as a significant piece of work that seeks to position the company as purpose-driven and taking its corporate digital responsibilities seriously. Vodafone’s wants to be seen as unashamedly committed to being an architect of a digital society, and as seeking to do this for the benefit of society, not just for commercial gain. Hence, being seen to be at the forefront of the push for regulation and being an exemplar of good practice in explaining how and what its AI systems do and what this implies for its stakeholders, is seen to be a key part of reputational safeguarding and enhancement. “We want people to trust us on issues like privacy and data security. We need to get better on using tools like social listening so that we can get a better handle on what they are concerned about, then we can set about addressing those concerns.”

On a day-to-day basis Vodafone also uses AI assistants such as chatbots and alerts customers to the fact that they are speaking to a robot, offering a human alternative if that is preferred.

Further, the company flags up a number of issues that they believe will move up the public agenda in the near and medium future. Some of this emanates from the public affairs arena where, in a European context, there is new EU legislation. The Artificial Intelligence Act (EU, 2021) is affirmative of a values-based approach which is strong on human rights; enhances governance of AI systems and insists on their safety; and provides for a ‘single market for lawful, safe and trustworthy AI applications’ (para 7). This Act is a major step towards regulation and categorises levels of risk in a pyramid that makes its assessment of danger explicit. At the top of the pyramid are items that are of importance to digital corporate communication such as subliminal messaging and social scoring by public authorities. Applying the risk criteria to digital corporate communication could help with a categorisation of concerns around micro-targeting and the kinds of audience analysis and content that is permissible. Certainly, there are now significant questions around facial (and by implication, other forms of) recognition.

In terms of the three areas of ethical concern outlined in this paper, Vodafone appears to be moving towards addressing them all. To address evidence concerns it has made a public declaration that it will be inclusive in the way it collects data and has put checks in place within its supply chain to assure itself that correct interpretations of data can be made (not simple correlations) and that the data itself is adequate. Outcome concerns are tackled in its policies to ensure human rights are respected and that its decisions do not impact unfairly on certain groups because of bias or inbuilt algorithmic discrimination. Epistemic concerns appear to be confronted by openly declaring when and how AI systems are being used by any stakeholder groups.

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### Conclusion and future directions

We have argued that the use of AI-based tools is profoundly affecting the *operational practice* of corporate communication. In addition, we have highlighted that there are wider issues at stake, namely the *governance* of the practice and organisational governance more generally. While much of the current research effort is focusing on operational practice – on the application and implications of AI-based tools for communication as well as on practitioners views and concerns with AI-based communication practice – less attention is being paid to the more fundamental shifts that AI brings to organisations as a whole, and how this creates new challenges for communicators. With organisations increasingly relying on AI to manage operations and make decisions, corporate communication will be expected to develop a nuanced understanding of these AI applications across all organisational spheres and the way they affect organizations and stakeholder relationships. The proliferation of AI in organisations brings about a new set of concerns with organisational conduct that corporate communicators will have to address. The implications this has for the reach, role and responsibilities of corporate communication needs to be a key focus of future research in this field.

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