## Trend Research in Communication Management: Introducing an **Interdisciplinary Approach Based on Futures Research Methodology**

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## ............ **Abstract**

Dynamic changes in organizations and their environments offer multiple opportunities for communication leaders if they are able to anticipate where their professional advice and services might be needed. Gaining such insights early on is by no means easy. Known trend studies tend to uncover what is already known in the field, while academic research is mainly concerned with deepening knowledge on current and past practices. This article shows how this gap can be closed by introducing a novel ap-proach to identify trends in communication management. The proposed methodological approach combines a systematic analysis of developments in society, management, and technology with the assessments of researchers from different disciplines and communication leaders. The approach has been applied in four consecutive trend research projects to date. It contributes to the body of knowledge in communication management and corporate communications and allows scholars and practitioners to take a fresh look at potential concepts and topics for knowledge transfer and continuous education.

Keywords: Artificial Intelligence, Communication Management, Communication Strategy, Corporate Communications, Decision-making, Digitalization, Futures Research

## 1. Introduction

Communication leaders currently find themselves in a rather paradoxical situation. Permanent changes in organizations and their environments call for more professional communication and create many opportunities for practitioners in the field. At the same time, it is evident that new challenges on the macro (e.g., inflation, fake news), meso (e.g., broken supply chains, remote work), and micro (e.g., changing consumer preferences, quiet quitting) levels require ongoing reflection on and redesign of current services, setups, and workflows of communication departments and agencies. Communication leaders must future-proof their units to leverage their full potential in a dynamic world. Reflexivity and change are deeply rooted in the practice of communication leadership (Falkheimer and Heide, 2023; Ragas and Culp, 2021).

However, gaining insights on upcoming challenges is by no means easy for practitioners. Research on the gaps between research and practice in communication management and public relations has identified several reasons why insights from academia are not picked up by practitioners (Claeys and Opgenhaffen, 2016; Hayes *et al.*, 2023). The literature urges scholars to strive for more relevant, applicable, timely, and understandable research, while practitioners are asked to use formats for knowledge transfer provided by various associations around the world.

This article builds on this debate, but advocates a different perspective. We invite readers to reflect on *research that matters for practice* in a new way. We argue that it is necessary, but not sufficient, to identify existing patterns, determinants, and solutions to current or past communication practices—which is the core of almost all empirical studies in the area. What is needed most from a leadership perspective (Berger and Meng, 2014) is a look at trends that will (probably) impact professional communication in the near future. We will outline the argument, introduce a method that has been successfully applied to identify such trends, and describe three sample trends to illustrate how this approach can inspire communication practice.

This article contributes to the body of knowledge by stimulating a conversation on trend studies that allows interested parties to take a fresh look at potential topics, designs, and concepts for knowledge transfer and continuous education. Our focus lies in explaining limitations of current trend studies and the opportunities of using approaches from futures research in our discipline.

## 2. The importance of trends for communication management practice

A look at the agenda of industry media and professional conferences reveals that political, societal, economic, or technological developments have a major influence on the practitioner's discourse in communication management. ChatGPT 3.0/4.0 and the consequences of a possible recession due to the Russian war in Ukraine were intensively discussed in the professional community while this article was written. Most likely, however, different topics will be in the foreground when it has been published. At the same time, academic conferences and journals are currently publishing research on communication practices during the now abated Covid-19 pandemic or surveys of Gen-Z stakeholders conducted before the respondents even thought about war in the Western hemisphere and its consequences. While such insights are indispensable for developing theories and unveiling interdependencies, it is understandable that communication practitioners are interested in more timely and forward-looking research. They are usually less interested in describing the past or the present, but prefer to think about the future.

Why is this so? The reason lies in the nature of decision-making in organizations and by leaders (Hodgkinson and Starbuck, 2008). Decisions in the social world, i.e., in or for situations that are not only influenced by the focal actor, but also by other entities and their (re-) actions as well as by overarching developments in society, are nearly always made in situations of uncertainty. Even if communication practitioners would know everything about their stakeholders and the best practices for dealing with them based on tons of empirical research, they need to consider that the world is in constant change. This means that decisions are always based on assumptions on the future (Phillips, 2019). Blechschmidt (2022), in an overview on trend management in business, argues that "we deal with the future to make better decisions in the present" (p. 3.). Unfortunately, however, it is not possible to make correct statements about the future. The future exists only as an idea in the minds of people, based on their individual knowledge, ideas, interpretations, and assessments (Neuhaus, 2022). Nevertheless, it is possible to overcome the plethora of different views of the future by using consistent methods to develop forecasts that support decision-making processes. This is particularly important in organizational contexts, where decisions are often made by teams and need to be justified to top management or (internal) clients.

A common concept to deal with the future and guide decision-making are trends (Blechschmidt, 2022; Gordon, 2008). The everyday understanding of trends refers to "a general direction in which a situation is changing or developing" (Oxford Dictionary, 2023). This

has stimulated debates on fashion trends, management trends, media usage trends, etc. Trends are often "seen as real developments that are first discovered, then described, and analyzed" (Blechschmidt, 2022, p. 8). However, this refers only to past developments that can be empirically observed like innovations and their diffusion (Rogers, 1962). Future developments, on the contrary, are cognitive constructs that can be systematized and described in different ways. Those constructs help decision-makers to deal with the future. A future trend can be defined as a "simplified description of an overarching development that results from the interaction of a content core with its environment and persists over a period of time of relevance in the respective context" (Blechschmidt, 2022, p. 10). This means that a trend must not only be described by its core content, e.g., a new technology, ecological change, or value shift. It needs to be understood in the interplay with the social context. For example, a growing awareness for inclusion as a future trend that influences organizations means something quite different in Latin America and in Asian countries. And globalization in the twenty-first century is different from globalization in 1602, when the Dutch East Indies Compagnie—the first publicly traded business—was founded to profit from this trend.

Along these lines, analyzing and reflecting on future trends can be viewed as an integral part of management in general (Gordon, 2008) and thus of communication management as well. Trend analyses support decisions by identifying foreseeable changes in the environment, stimulating reflections on opportunities and risks, and pointing out needs for redefining goals, means, structure, or processes at an early stage (Blechschmidt, 2022).

More specifically, *communication practitioners* need sound insights into *future trends that influence their core activities and related management processes*. The core activities are usually described as messaging (communicating with relevant stakeholders based on favorable relationships with them) and listening (monitoring opinion building and stakeholders to advise top management and (internal) clients) (Zerfass and Link, 2022). These management processes include approaches for planning and evaluating campaigns, as well as recruiting and leading staff, and providing organizational setups, technological resources, and infrastructures for content production (Einwiller *et al.*, 2022). Accordingly, future trends affecting communication in organizations and its management can originate from three main areas:

- *Society*: Trends emerging in different domains of public communication, opinion formation, and values that might change people's attitudes and behavior, and affect expectations toward organizations, their activities, and their communication;

- Management: Trends in strategic management and organizational design that may influence how professional communication activities are planned, organized, led, and evaluated; how they are embedded in organizations or networks between clients and service providers; and how communication departments and agencies operate;
- Technology: Trends in software, digital services, hardware, and digital infrastructure that could either impact communication management or be used by practitioners in the field.

## 3. Current approaches to identify future trends for communication management

Unfortunately, it is difficult for communication practitioners to identify future trends that can be used to make decisions along the lines described above. This seems surprising since there is a wealth of academic and applied research on communication management and corporate communications worldwide.

However, as outlined above and criticized elsewhere (e.g., Hayes et al., 2023), today's academic research in the field is mainly concerned with deepening knowledge on wellknown aspects like crisis and corporate social responsibility communication, social media, or or-ganization-public relationships, and with describing current practices in the field (e.g., on pandemic-related communication) through surveys, interview studies, content anal-yses, or experiments. This results in suitable articles for academic journals, but seldom in inspiring ideas that help organizations rethink their practices. New developments like agility, diversity, or CommTech are usually only picked up by academic research after they have already arrived in practice.

Trade magazines, professional associations, agencies, and applied research centers fill the gap by publishing trend reports (e.g., CIPR State of the Profession, Cision PR/Marketing Trends, Meltwater PR Trends, PRovoke Media Forecasts, USC Global Communication Report). They are usually based on interviewing practitioners in the field, which means that they reiterate existing knowledge but rarely introduce new topics. Other applied studies track the development of specific issues such as trust, reputation, or risk in relation to organizations and their stakeholders, but lack an open eye on new developments.

Future trends of the profession are sometimes also discussed in methodologically sound, academic studies of the profession like the European, North American, Latin American, and Asia-Pacific Communication Monitor, the Boston University Communications Bellwether Survey, and similar research. However, while they often introduce new developments into

the scholarly and professional debate, they are also limited to the topics that were deemed important by the researchers who designed the studies.

To date, the most promising way to learn about future trends that could impact communication management is based on the *curation of interdisciplinary findings* by conference organizers, trade journalists, and those who organize the transfer of knowledge to practitioners. Technology specialists or experts on societal trends are often cited in industry magazines or presented at congresses. However, these inspirations are rarely used to systematically identify consequences for the core activities or management processes of communications in organizations. A notable exception is the Institute for Public Relations' annual overview on Top Public Relations Insights, which presents key findings from recent studies on current and future trends (e.g., Fajardo and McKechnie, 2024). It features research on the profession as well as research on management, media, business, and social developments, but does not identify trends by itself.

Hence, a gap that needs to be filled is the early identification of future trends that are not yet present in professional discourse. This is a worthwhile goal for academic research that seeks to matter for practice. However, it is also obvious that conventional methods of conducting trend research in our field are not adequate to meet this challenge. An alternative approach is needed.

## 4. A novel approach based on futures research

Identifying trends that may impact the future of individuals, organizations, and societies is an important segment of *futures research*. This discipline, also referred to as future studies, futurism, or futurology, is an established field of scholarship and education with an institutionalized academic community, journals, professorships, and graduate programs at research universities (Andersson, 2019; Bell, 2014; Gerhold *et al.*, 2022; Wilenius, 2017). Its disciplinary core is the systematic and holistic study of social, economic, and technological developments that will influence how we will live, work, and interact in the future (Philipps, 2019).

At first glance, futures research has something in common with research in communication management and corporate communications. It "sometimes struggles to explain what the field is about to academics in more established disciplines" (Fergnani and Chermak, 2020, p. 1). It has not been very successful in becoming part of the social science establishment, but the topics addressed and the insights generated are quite attractive for organizations and their leaders. The literature on futures research attributes this to a variety of reasons that are also well known in our discipline, including a lack of theory building, a cult

of personality (arguments by prominent experts and scholars are seldom questioned), and a conflation of predictions based on a simple positivist epistemology with well-reasoned forecasts of future trends based on social constructivism (Fergnani and Chermak, 2020).

Nonetheless, futures research today offers a wide range of established methods for identifying, analyzing, evaluating, and describing future trends (Gerhold et al., 2022). We took this as a starting point to develop a novel approach for identifying future trends in communication management, i.e., developments that (could) impact stakeholder communication and/or communication functions and units within the next five years. These trends must be distinguished from megatrends (Naisbitt, 1982) in the sense of long-lasting changes with a global significance (e.g., digitization, urbanization, demographic change) and shortlived hypes (Aral, 2020) that attract attention but fade away without lasting impact (e.g., trending hashtags) (Blechschmidt, 2022).

#### 4.1. Background and project design

The desire to identify future trends for communication management that are not yet discussed in the professional and academic communities of the field culminates in a fundamental challenge. It is obvious that researchers involved in this process need to contribute multiple disciplinary perspectives in order to understand and interpret upcoming trends in the fields of society, management, and technology. At the same time, a proper knowledge of the scientific body of knowledge in communication management is required to assess the potential impact on the field in detail. Moreover, the undeniable gap between theory and practice in all disciplines demands researchers who have in-depth knowledge and access to everyday communication management practices in organizations.

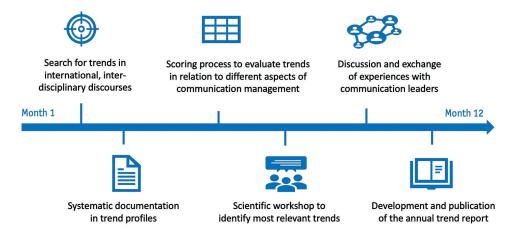
Accordingly, first step was to assemble an interdisciplinary team of researchers with a disciplinary background in communication science, communication management / corporate communications, business administration, strategic management, and information systems. Another requirement was to involve communication leaders in the project design from the beginning to ensure that the project and its methodology were understood, that practitioner perspectives could be integrated into the research process, and that the research findings would be presented in a meaningful way for the profession. An intensive process of discussion and negotiation was achieved in 2020. The research team formed was led by two chair professors from different universities with a different disciplinary background, as it was complemented by two research associates who contributed additional fields of expertise. The alignment with practice was provided by the funder of the research project, the (Academic Society for Management & Communication). This nonprofit think tank is supported by more than 45 global companies, their chief communication officers, and by a number of research universities. It provides a grant for a series of trend studies over several years (2021–2026), supports by preparing and disseminating research results to practice (reports, webinars, articles, interviews for industry media), and enables researchers to engage communication leaders in the research process.

#### 4.2. Method

Future trends for the field may originate from scientific research maturing into practice or applied research in other disciplines adjacent to communication management. This research project therefore focuses particularly on current academic and professional discourses in the areas of management, technology, and society (as defined above). These are monitored and assessed in a structured process based on futures research methods (Gerhold *et al.*, 2022) and evaluated with regard to their potential relevance for communication practice (Figure 1):

- 1) Screening: The annual research process begins with selecting information sources that provide relevant insights into the discourse in the areas of management, technology, and society. These sources primarily include recent publications from scientific journals and conferences in the respective focus areas, but also selected newspapers (e.g., The Economist), magazines (e.g., Harvard Business Review, Wired), social news sites (e.g., Reddit Science), blogs and websites (e.g., ReadWrite), whitepapers, and corporate trend reports (e.g., from the Future Today Institute). Sources are selected based on their scientific reputation (impact scores, rankings) within the research areas, or their general reputation and website traffic for non-academic sources. All selected sources are monitored and screened for at least half a year. Screening and complementary research on specific potential trends also considers content published outside of this time frame.
- 2) Trend profiles: Each potential trend is systematically documented in a trend profile, which consists of a brief description and several criteria to evaluate the relevance of the trend for communication management. Specifically, we assess the impact of the trend on communication functions and units (e.g., governance, goals, competencies), processes (e.g., platforms, formats, stakeholder interaction), and management (e.g., content processes, cost structures). We also consider the extent to which a trend offers communication leaders the opportunity to raise their profile within the organization by advising on strategic issues. In total, up to 42 trend profiles were shortlisted annually during this phase in the trend studies conducted so far.

**FIGURE 1.** The structured approach to identifying future trends for communication management.



**SOURCE:** Authors' research

- 3) Scoring: Based on the criteria outlined in the trend profiles, a scoring method was derived and used to rate each of the trends. The scoring is conducted individually by a group of experienced researchers that include and expands the core research team. Most of these academics have also worked full-time in the practice of communication management. Based on the ratings and qualitative feedback on the trends, a selection of trends (for example: four technology, three management, and three societal trends for the 2023 study) are chosen for further consideration.
- *4) Selection*: In the next step, the trends are discussed in a scientific workshop of the extended research group. As a result, five key trends are identified.
- 5) Discussion with practitioners: The key trends are then discussed with several chief communication officers to complement the systematic selection and gain more insights into possible implications and use cases by spontaneous and inductive reasoning. This enriches the arguments and forecasts developed deductively by the researchers. The number of practitioners involved has varied in the annual studies conducted so far (up to 10). Interviewees and commentators are purposefully sampled to ensure diversity in terms of industry, gender, age, etc.
- 6) Report: In a last step, all trends are described in detail in an annual report designed to in-

form communication practitioners in a concise and appealing manner with core definitions, examples, further reading, initial comments from the leaders involved, etc.

#### 4.3. Outcomes and impacts for academia and practice

The approach has been applied for four consecutive years now. The annual reports have been downloaded several thousand times. They are featured in trade publications in the country and have been presented multiple times by researchers at professional conferences as well as in leadership meetings and competency trainings for communication departments. Several communication departments of blue-chip companies have started internal projects to discuss trend implications and initiate pilot projects, e.g., in the area of content generated by artificial intelligence (AI), a trend identified in our 2022 study and by now widely discussed due to applications like ChatGPT, DALL-E, and Synthesia.

Apart from this evidence-based impact for practice, the trend research has also opened new doors for academic research. The researchers were able to develop several follow-up projects in the sense of deep-dive studies that examine specific trends in more detail. Some of these are being conducted in cooperation with companies that have understood the relevance based on the trend report and are supporting further research, e.g., by developing use cases based on technological developments. To date, five additional research projects have been conducted and at least two graduate theses have explored specific trends in more detail in empirical studies.

# 5. Results: Selected trends identified with the novel approach

The last section of this article illustrates the results of our research by outlining future trends for communication management in the 2023 and 2024 studies. The trends are a selection from the 20 trends identified in this study series so far.

#### 5.1. Scarcity management

This future trend addresses the transition from a world full of abundance, described by Harvard economist John K. Galbraith (1998) as "affluent societies," to one of scarcity and bottlenecks. Shortages in many areas have been exacerbated by current events such as the Covid-19 pandemic or the Russian war against Ukraine, yet also by demographic changes leading to labor shortages as well as by dwindling resources leading to rising energy costs. As a result, many products and services are in short supply or are simply not available anymore.

In this toxic mix, organizations of all kinds face the challenge of running their businesses despite mounting shortages. However, scarcity also offers opportunities. For example, the need to wait for a product can make it more attractive and raise profitability for those who can deliver. This also has consequences for communication management. Managing brands or responding to stakeholder requests about delays or disrupted services needs to be handled with caution and by striking a balance between economic needs and responsibility toward the common good. Moreover, communication departments and agencies need to evaluate their own business models to ensure that they can fulfill their mandates with fewer resources or in a different way:

The trend Scarcity Management refers to dealing carefully with shortages and bottlenecks to ensure that both overarching organizational goals and more specific functional objectives can be achieved.

Dealing with bottlenecks was a well-known practice in previous decades. It has become so difficult today because the economic system has become totally focused on the abundance paradigm of the past. Organizations have been optimized by interlocking supply chains, just-in-time production, and flexible campaigns using whatever kind of cross-media activity is needed at a given time. Consequently, today's communication strategies are largely rooted in the affluent economy. However, scarcity has been intensively studied for many years, especially in marketing research and behavioral psychology. One key finding is that scarcity affects different levels (macro, meso, micro), and can have positive as well as negative impacts (Weinstein, 2022).

#### Reflections for practitioners

Communication leaders need to deal responsibly with scarcity in order to balance its positive and negative aspects between competitive advantage and social responsibility. This concerns both communicating for their organizations and managing their own activities:

1) Communicating challenges and consequences of scarcity. Scarcity presents both challenges and opportunities for communications depending on its concrete impact on specific stakeholders, their predispositions, and expectations. For example, a pre-order model and waiting times for a desired product can make it more attractive. In this case, consumer PR can focus on positively framed storytelling. On the other hand, delays and waiting times for products can generate frustration and complaints, and sometimes even require crisis communication to avoid panic buying. Communication strategies must address the tension between economic rationality and social responsibility as well as between proactive and reactive approaches (Figure 2).

FIGURE 2. Managing communication in times of scarcity and bottlenecks

	Driving competitive advantage	Assuming social responsibility
Proactive participation i relevant discourses	Positive framing of scaricity (Consumer PR)	Transparent communication about delayed delivery dates (Consumer PR)
Reactive participation in relevant discourses	Motivating frustrated employ- ees suffering from lack of sup- plies (Internal Communication)	Refusing public statements on the security of supply in critical industries (Public Affairs)

**SOURCE:** Author's research

2) Managing scarcity in communication units. Communication departments and agencies may also be influenced by scarcity. Be it missing resources for print products, personnel for events, or energy-saving measures: bottlenecks force communication leaders to redesign operations. They could introduce new communication products and services that do without scarce resources, or try to adjust the high expectations of senior management and external stakeholders. They can build more resilient internal workflows and enforce internal budgeting and revenue models that cushion supply uncertainties. Last but not least, practitioners must outline the value created by buffering negative business effects of bottlenecks through communications in order to keep or increase budgets. This requires a thorough understanding of the impact of scarcity on the organizations and the scope of influence of communication management.

#### 5.2. Unimagination

Many scenarios seem so unlikely that they are considered impossible. However, unimaginable incidents nevertheless occur. Major upheavals in today's societies challenge existing ways of thinking and problem-solving for people and organizations alike, including communication professionals and their stakeholders. Incidents or developments are usually unimaginable when they are unprecedented, or if their scale or impact differs greatly from previous experience (De Marzo *et al.*, 2022). Whether something is fully imaginable or not is always a matter of individual perception (Zittoun and Gillesspie, 2015). However, precisely because of this, the ability to deal with the unimaginable is becoming increasingly important for organizations:

The trend Unimagination describes the ability to accept and respond to previously unimaginable situations as well as to adapt structures and processes in order to be prepared for future scenarios.

Although this is not completely new, growing awareness of the topic can be observed in many disciplines (e.g., Arenas and Silver-Malyska, 2021). Previously unimaginable situations or developments can paralyze internal and external stakeholders and influence their perceptions and attitudes—sometimes in positive ways, but mostly negatively. It is also difficult to retain the capacity to act in unexpected situations. Hence, unimagination is not about being well prepared for every incident with management wisdom and predictions. Instead, it is about recognizing different levels and types of incidents, and distinguishing between truly unimaginable and less unimaginable ones. Unimagination describes a skill that helps people and organizations alike to remain capable of acting as well as to adapt structures and processes in order to be prepared. This skill can be trained with a range of methods on the individual level (better tolerating uncertainty and insecurity, ambiguity tolerance, intercultural experience; e.g., Holmes, 2015; Tadmor et al., 2012) and at the organizational level (reducing confusion and quickly gaining the upper hand in uncertain situations through improvisation and resilience; e.g., Ratten and Hodge, 2016).

#### *Reflections for practitioners*

Communication units are often more resilient and more skilled at improvising than other departments in organizations. Dealing with the unimaginable is somehow already part of their routine. Communication practitioners have to bridge internal constructions of reality in their organization and its subsystems and multiple perceptions by external stakeholders. Many of them are also well equipped to deal with the unimaginable due to their experience in handling crises or 24/7 media inquiries. As a consequence, they can help their organizations and stakeholders to navigate through unimaginable situations by combining goal orientation with the readiness to react strategically when the unimaginable occurs. Two aspects are central to this:

- 1) Informing stakeholders and coping with their lack of orientation is part of any approach to dealing with unimaginable incidents. Communication professionals can help to ensure that internal and external stakeholders remain capable of taking action. For example, all information should be quickly collected and clearly communicated when an unforeseen situation occurs. This can reduce the influence of other sources and reduce rumors. Communication management can also prevent people from being paralyzed, for example by building relationships and trust and by strengthening the self-efficacy of employees through internal communication.
- 2) Communicators can support other members of their organization in building unimagination

capabilities. For example, resilience training for executives and coworkers across the organization's departments can be provided based on insights into how the communication unit has responded to unimaginable incidents in the past. However, this should not be done without cultivating and expanding one's own unimagination skills, e.g., by using the OODA Loop, a management tool originating from military strategy that helps people act quickly in moments of paralysis and take advantage of the surprise effect (Kaplan *et al.*, 2020).

#### 5.3. Augmented Workflows

When thinking about the future of work, artificial intelligence will inevitably pop up (Autor et al., 2022; Elliott, 2022). Organizations are increasingly engaging with, implementing, or developing AI-based technologies with the aim of enhancing value creation and obtaining competitive advantage. AI promises, among other things, to improve productivity by performing routine tasks, reducing human error, and generating insights that improve decision quality (Enholm et al., 2022). However, most occupations involve solving a variety of tasks, some of which are easy to automate with AI, some of which are difficult. Therefore, especially in knowledge work (i.e., work which relies on the creation, distribution, or application of knowledge), AI-based technologies will rather augment than replace human workers (Fügener et al., 2021; Jarrahi et al., 2022). They will not take over the tasks of people completely but collaborate closely with human workers. This will change job profiles and modify existing workflows (Hurwitz et al., 2020). For example, graphics experts might describe to an AI application what kind of visual they need and select a fitting image from suggestions it created. The design of augmented workflows will affect how human workers will respond to the introduction of AI-based technologies and ultimately whether the potential of such technologies can be realized in practice (Ulfert et al., 2022):

The trend Augmented Workflows focuses on a future of work characterized by the collaboration of humans and AI-based technologies, which changes the scope, focus, or outcome of task accomplishments and how organizations deal with this situation.

AI-based technologies challenge existing modes of interaction between humans and technology. For example, self-learning AI-based technologies are not predetermined, but their functionality evolves during use. Some AI-based technologies can be activated without human intention or awareness (e.g., voice-activated systems). These aspects will affect task performance (e.g., variability of outcomes) and workers' experience (e.g., privacy, self-efficacy) and should be considered when augmenting communication workflows with AI.

#### *Reflections for practitioners*

New ways of interaction between human workers and AI-based technologies challenge communication management in many ways. Those in charge must weigh the opportunities and challenges related to the particular communication department or agency. This might include:

- 1) Evaluating the impact of augmented workflows on communication content. AI-based technologies can augment the identification of stakeholder interests, the selection and creation of messages, the handling of stakeholder requests, and much more. AI-based technologies are likely to influence what, how, and where content is communicated. Communication leaders should evaluate how the outcomes of internal workflows will change due to intensified augmentation.
- 2) Identifying the most promising use cases for augmenting workflows with AI-based technologies, determining the necessary skillsets, and developing staff competencies.
- 3) Preparing for challenges due to shifts in agency. The increasing relevance of non-human agency which is based on workflows modified with AI will raise new challenges, especially regarding accountability for content (Buhmann and Fieseler, 2021). It is advisable to implement AI-based technologies that are explainable, i.e., that present some form of reasoning for the AI's behavior to those who use it.
- 4) Considering the human factor in augmented workflows. The introduction of AI-based systems will not leave human workers unaffected. Communication leaders should try to understand what competencies or tasks employees view as integral to their professional identity. This will help them to be mindful of potential negative effects for individuals and teams (e.g., feeling unmotivated, deskilled) when augmenting these integral elements with AI (Stieglitz et al., 2022).

#### 5.4. Decoding Humans

Applications for capturing physiological and behavioral data from humans through non-invasive and invasive hardware are advancing. They range from audio surveillance systems and eye-tracking cameras to neurotech devices (Hain et al., 2023) like brain-computer interfaces (Munavelli et al., 2023) and biometric wearables (glasses, earbuds, headsets with EEG technology) that connect directly with the nervous system. Combined with AI-based software for data interpretation (e.g., inferring emotions from brain activity), these technologies enable new forms of interaction between the human body, mind, and technology. The trend "Decoding Humans" describes the emergence of technologies capable of sensing and responding to human thoughts and feelings by recording, interpreting, acting upon, and altering cognitive and emotional states.

Traditionally, interactions with technology-based devices such as computers, smartphones, and machines involve structured inputs (e.g., specific commands, text, controls) deliberately given by the human user. In the future, however, technology will increasingly be able to automatically capture physiological and behavioral data and use it to respond to and directly stimulate human feelings and thoughts, sometimes without their awareness. Physiological data (e.g., heart rate, skin temperature, galvanic skin response) can already be tracked by consumer hardware like wearables or smart watches. Appropriate software can then infer emotional and cognitive states from this data. There is also a range of hardware and software for collecting and interpreting behavioral data, such as facial expressions, eye movements, gestures and body movements, speech, tone of voice, keystrokes, and computer mouse movements. For example, facial recognition software and computer vision algorithms can analyze facial expressions from videos to determine whether someone is happy, sad, angry, surprised, or in another emotional state (Huang et al., 2023). These technologies change how devices like computers are operated. It is already possible to navigate computer software just with thoughts and without manual or voice commands by using brain-computer interfaces like the MW75 Neuro headphones that received an innovation award the CES 2024 conference in early 2024. The other way around, brain-computer interfaces can also send signals to the human body and influence emotional and cognitive states.

How might the possibility to read from and write to the mind affect individuals and society? With this technology still evolving, looking at existing technologies that are responsive to human behavior can offer a glimpse of what might be. Social media platforms already use AI methods to analyze and maximize how much time users spend on a platform. The basic idea is simple—if users linger over certain content, show them more of it and related content to increase the time they spend on the platform. Emerging technologies, with access to more diverse physiological and behavioral data, can pave the way for applications optimized for evoking specific emotions, thoughts, or behaviors. The opportunities for improved automated, contextualized, and personalized messaging and listening activities are obvious. On the other hand, such applications could also exacerbate many of the challenges linked to social media (e.g., polarization, addiction, mental health issues).

#### Reflections for practitioners

Communication leaders should closely monitor this technological trend which is already debated in strategic management and marketing (Farahany, 2023; Mende et al., 2023). This can include:

- 1) Following the neurotech debate about future applications that could infer what a person sees, hears, thinks, feels, or wants by measuring and interpreting physiological and behavioral data - even without their awareness.
- 2) Identifying and assessing new opportunities for measuring the effectiveness and success of communication activities (e.g., in controlled situations such as internal or external events, showrooms) and establishing settings for automated corporate communications by creating and conveying personalized and context-specific content.
- 3) Utilizing advanced methods for personal development and training of communicators through real-time feedback based on monitoring systems, biometric wearables, and non-invasive brain-computer interfaces.
- 4) Remaining skeptical of bold claims that commercial applications can reliably detect emotional and cognitive states, and being aware of the reputational, legal, and ethical, challenges associated with using such technologies, including concerns about transparency, privacy, and safety.

## 6. Discussion and conclusion

This article argues that a fruitful way to connect communication management and corporate communications research to practice is a stronger focus on the future of the field. This can be done by identifying trends that are likely to affect practitioners in the near future. A novel approach based on futures research has been explained; evidence-based impacts for academia and practice have been reported; and three trends have been described to illustrate sample results.

Like any research, this study series is not without limitations. The scope of the method is limited by the resources available for the project. Expanded financial and staff resources would allow the team to cover even more sources, prepare more detailed trend profiles, and incorporate additional disciplinary perspectives or more practitioners in the research process. The process relies on sources available in three major world languages; others are excluded due to limited access or knowledge of the researchers involved. Additionally, the practitioner perspective is shaped by communication leaders working for global companies

headquartered in Europe and North America. More perspectives could be added. Nonetheless, the approach presented in this article has proven to be successful in many ways. Similar studies in other regions, cross-cultural and collaborative initiatives in this field, and additional efforts to utilize futures research methods for communication management are implications that should be discussed.

#### References

- Andersson, J. (2018). The future of the world: futurology, futurists, and the struggle for the post cold war imagination. Oxford University Press.
- Aral, S. (2020). The hype machine. Currency.
- Arenas, N., Silver-Malyska, T. (2021). Imagining the unimaginable: Best practices for returning to work post-COVID-19.
  Benefits Quarterly, 37 (1), 45–47.
- Autor, D.A., Mindell, D.A., Reynold, E.B. (2022). The work of the future: Building better jobs in an age of intelligent machines.
  MIT Press.
- · Bell, W. (2014). Foundations of future studies. Routledge.
- Berger, B. K., Meng, J. (Eds.). (2014). Public relations leaders as sensemakers. Routledge.
- · Blechschmidt, J. (2022). Trend management. Springer.
- Buhmann, A., Fieseler, C. (2021). Tackling the grand challenge of algorithmic opacity through principled robust action. *Morals & Machines*, 1 (1), 74–85. <a href="https://doi.org/10.5771/2747-5182-2021-1-74">https://doi.org/10.5771/2747-5182-2021-1-74</a>
- Claeys, A., Opgenhaffen, M. (2016). Why practitioners do (not) apply crisis communication theory in practice. *Journal of Public Relations Research*, 28 (5–6), 232–247.https://doi.org/0.1080/1062726X.2016.1261703
- De Marzo, G., Gabrielli, A., Zaccaria, A., Pietronero, L. (2022). Quantifying the unexpected: A scientific approach to black swans. *Physical Review Research*, 4 (3), 1–10. https://doi.org/10.1103/PhysRevResearch.4.033079
- Einwiller, S., Seiffert-Brockmann, J., Ninova-Solovykh, N. (2022). Agile integrated communication: A content-based approach. In: Falkheimer, J., Heide, M. (Eds.), *Research handbook of strategic communication* (pp. 400–415). Edward Elgar.
- Elliott, A. (Ed.). (2022). The Routledge social science handbook of AI. Routledge.
- Enholm, I. M., Papagiannidis, E., Mikalef, P., Krogstie, J. (2022). Artificial intelligence and business value: A literature review. *Information Systems Frontiers*, 24, 1709–1734. https://doi.org/10.1007/s10796-021-10186-w
- Fajardo, O. K., McKenchie, K. (2024). IPR top 15 public relations insights of 2023. Available at: <a href="https://instituteforpr.org/wp-content/uploads/Top-Studies-Report-2023">https://instituteforpr.org/wp-content/uploads/Top-Studies-Report-2023</a> 1.30.24.pdf (accessed 18 March 2024).
- Farahany, N. A. (2023). Neurotech at work. Harvard Business Review, 102 (2), 43-48.
- Falkheimer, J., Heide, M. (2023). Strategic communication (2nd ed.). Routledge.
- Fergnani, A., Chermak, T. J. (2020). The resistance to scientific theory in futures and foresight, and what to do about it. Futures & Foresight Science, 2 (3–4), 1–16. https://doi.org/10.1002/ff02.61
- Fügener, A., Grahl, J., Gupta, A. and Ketter, W. (2021). Cognitive challenges in human–artificial intelligence collaboration: Investigating the path toward productive delegation. *Information Systems Research*, 33 (2), 678–696. <a href="https://doi.org/10.1287/isre.2021.1079">https://doi.org/10.1287/isre.2021.1079</a>
- Galbraith, J. K. (1998). The affluent society (5th ed.). Houghton Mifflin Harcourt.
- Gerhold, L., Holtmannspötter, D., Neuhaus, C., Schüll, E., Schulz-Montag, B., Steinmüller, K., Zweck, A. (Eds.). (2022).
  Standards of futures research. Springer VS. <a href="https://doi.org/10.1007/978-3-658-35806-8">https://doi.org/10.1007/978-3-658-35806-8</a>
- Gordon, A. (2008). Future savvy: identifying trends to make better decisions, manage uncertainty, and profit from change. Amacom.

- · Hain, D. S., Jurowetzki, R., Squicciarini, M., Xu, L. (2023). Unveiling the neurotechnology landscape: Scientific advancements innovations and major trends. UNESCO. https://doi.org/10.54678/OCBM4164
- · Hayes, R. A., Robertson, S. L., Preston, A.N. (2023). Does public relations scholarship need better PR? Practitioners' perspectives on academic research, Public Relations Review, 49 (1), art, 102273, https://doi.org/10.1016/j.pubrev.2022.102273
- · Hodgkinson, G. P., Starbuck, W. H. (Eds.). (2008). The Oxford handbook of organizational decision making. Oxford University Press.
- Holmes, J. (2015). Nonsense: the power of not knowing. Crown Publishing.
- · Huang, Z.-Y., Chiang, C.-C., Chen, J.-H., Chen, Y.-C., Chung, H.-L., Cai, Y.-P., & Hsu, H.-C. (2023). A study on computer vision for facial emotion recognition. Scientific Reports, 13 (1), 8425.https://doir.org/10.1038/s41598-023-35446-4
- Hurwitz, J., Morris, H., Sidner, C., Kirsch, D. (2020). Augmented intelligence The business power of human-machine collaboration, CRC Press.
- Jarrahi, M.H., Lutz, C., Newlands, G. (2022). Artificial intelligence, human intelligence and hybrid intelligence based on mutual augmentation. Big Data & Society, 9 (2), 1-6. https://doi.org/10.1177/20539517221142824
- Kaplan, R., Leonard, H., Mikes, A. (2020). The risks you can't foresee: What to do when there's no playbook. Harvard Business Review, 98 (6), 40-46.
- · Mende, M., Noble, S., & Sugar, T. (2023). From homo sapiens to homo superior? Wearable Robotics as the Platform for Transhumanist Marketing. Journal of the Academy of Marketing Science, 51 (4), 757-766. https://doi.org/10.1007/s11747-023-00949-z
- · Munavalli, J. R., Sankpal, P. R., Sumathi, A., & Oli, J. M. (2023). Introduction to brain-computer interface. In: Sumithra, M. G., Dhanaraj, R. K., Milanova, M., Balusamy, B., Venkatesan, C. (Eds.), Brain-computer interface (pp. 1–24). Scrivener.
- · Naisbitt, J. (1982). Megatrends. Warner.
- Neuhaus, C. (2022). Images of the future. In: Gerhold, L. et al. (Eds.), Standards of futures research. Springer VS.
- Oxford Dictionary. (2023). Trend. Available at: www.oxfordlearnersdictionaries.com/definition/english/trend 1 (accessed 18 March 2024).
- Phillips, F. (2019). What about the future? New perspectives on planning, forecasting and complexity. Springer.
- Ragas, M. W., Culp, R. (2021). Business acumen for strategic communicators. Emerald.
- Ratten, V., Hodge, J. (2016). So much theory, so little practice: A literature review of workplace improvisation training. Industrial and Commercial Training, 48 (3), 149-155. https://doi.org/10.1108/ICT-08-2015-0053
- · Rogers, E. M. (1962). Diffusion of innovations. Free Press.
- Stieglitz, S., Mirbabaie, M., Möllmann, N. R., Rzyski, J. (2022). Collaborating with virtual assistants in organizations: Analyzing social loafing tendencies and responsibility attribution. Information Systems Frontiers, 24 (3), 745–770. https:// doi.org/10.1007/s10796-021-10201-0
- Tadmor, C., Hong, Y., Chao, M., Wiruchnipawan, F., Wang, W. (2012). Multicultural experiences reduce intergroup bias through epistemic unfreezing. Journal of Personality and Social Psychology, 103 (5), 750–772. https://doi.org/10.1037/a0029719
- Ulfert, A.-S., Antoni, C. H., Ellwart, T. (2022). The role of agent autonomy in using decision support systems at work. Computers in Human Behavior, 126, 106987. https://doi.org/10.1016/j.chb.2021.106987
- Weinstein, M. (2022), The power of scarcity, McGraw Hill,
- Wilenius, M. (2017). Patterns of the future. World Scientific.
- · Zerfass, A., Link, J. (2022), Communication management. In: Falkheimer, J., Heide, M. (Eds.), Research handbook of strategic communication (pp. 237-258). Edward Elgar.
- Zittoun, T., Gillespie, A. (2015). Imagination in human and cultural development. Routledge.

# Istraživanje trendova u upravljanju komunikacijama: Uvođenje interdisciplinarnog pristupa temeljenog na metodologiji predviđanja budućnosti

#### Sažetak

Dinamične promjene u organizacijama i njihovim okruženjima nude višestruke prilike za voditelje komunikacija ako mogu predvidjeti gdje bi njihovi profesionalni savjeti i usluge mogli biti potrebni. Rano steći takve uvide nije nimalo lako. Studije poznatih trendova nastoje otkriti ono što je već poznato na terenu, dok se akademska istraživanja uglavnom bave produbljivanjem znanja o sadašnjim i prošlim praksama. Ovaj članak pokazuje kako se jaz može zatvoriti uvođenjem novog pristupa identificiranju trendova u komunikacijskom upravljanju. Predloženi metodološki pristup kombinira sustavnu analizu razvoja društva, menadžmenta i tehnologije s procjenama istraživača iz različitih disciplina i voditelja komunikacija. Pristup je do danas primijenjen u četiri uzastopna projekta istraživanja trendova. Doprinosi korpusu znanja u upravljanju komunikacijama i korporativnim komunikacijama te omogućuje znanstvenicima i praktičarima da iznova pogledaju potencijalne koncepte i teme za prijenos znanja i kontinuirano obrazovanje.

**Ključne riječi:** umjetna inteligencija, komunikacijski menadžment, komunikacijska strategija, korporativne komunikacije, donošenje odluka, digitalizacija, istraživanje budućnosti