Artificial Intelligence

Concepts, applications and challenges of AI in Corporate Communications

▶ While marketing has taken the lead in researching and applying artificial intelligence, corporate communications are lagging behind. This is despite the fact that communicators can easily access social media and internet data, providing a vast data pool for AI purposes.

▶ AI can support corporate communications in a raft of ways ranging from analytics to evaluation, from chat bots to content creation. However, most practitioners know far too little about AI. Keeping tabs on ethical aspects and creating transparency about data and AI applications within an organization are crucial to avoid losing trust.

▶ This Communication Snapshot summarizes the latest findings and insights on artificial intelligence in connection with corporate communications.

Getting smart on AI

Slowly but surely, artificial intelligence is finding its way into corporate communications. Chatbots, digital voice assistants like Siri and Alexa, and big data analysis are all developments enabled by artificial intelligence. But despite the urgent need to find out about AI, communication managers' knowledge is generally inconsistent and hazy. Many practitioners are currently asking what AI actually means with regard to corporate communications.

*Scientifically speaking, AI comprises flexible decision-making processes and actions by software-driven agents. They adapt to changing goals and unpredictable situations, learn from experience, and are based on technologies like natural language processing, data retrieval and knowledge representation, semantic reasoning, and machine learning. *[1]

But what exactly are the differences between automation, big data and AI? We have asked Prof. Stefan Stieglitz (University of Duisburg-Essen):

Automation seeks to replace tasks previously performed by humans with algorithms. These algorithms take decisions based on a predefined structure. They can be especially useful for routine tasks such as travel expense claims.

Big data is a diffuse concept and it's hard to say when a set of data qualifies as big data. Four criteria also known as the 4 Vs are applied: volume (a large number of data points), velocity (rapidly processing these data points), variety (referring to heterogenous data points that can be evaluated), and veracity (ensuring data quality).

Artificial intelligence in turn is often applied to support decision-making. However, the more algorithms learn from experience, the harder it is to understand the criteria behind how decisions are taken. AI can easily become a black box.

A glance at the figures

Research on Artificial Intelligence in Corporate Communications is very scarce but we have compiled some interesting findings:

▶ The **European Communication Monitor 2019** was the first large-scale survey to explore the individual adoption, knowledge and perceptions of AI among communication practitioners in Europe. It found that three out of four believe AI will change their profession. At the same time, only a third believes that the routine work of their own communication department or agency will be impacted (32%) or that their own job will change (37%). It also found that the biggest hurdles for implementing AI are insufficient competencies of staff and a lack of infrastructures (see graphic below).*[1]

▶ In **marketing**, AI is widespread: One in two marketing heads worldwide reported that they have already used AI – and that was two years ago. Meanwhile, two out of three stated that they used automation platforms for marketing activities. *[2]

▶ **AI-based digital assistants** are set to become a key element of work in the future. The Gartner Institute predicts that by 2021, 25% of all digital workers will use a virtual employee assistant daily – up from less than 2% in 2019.*[3]

Challenges for implementing AI in communications
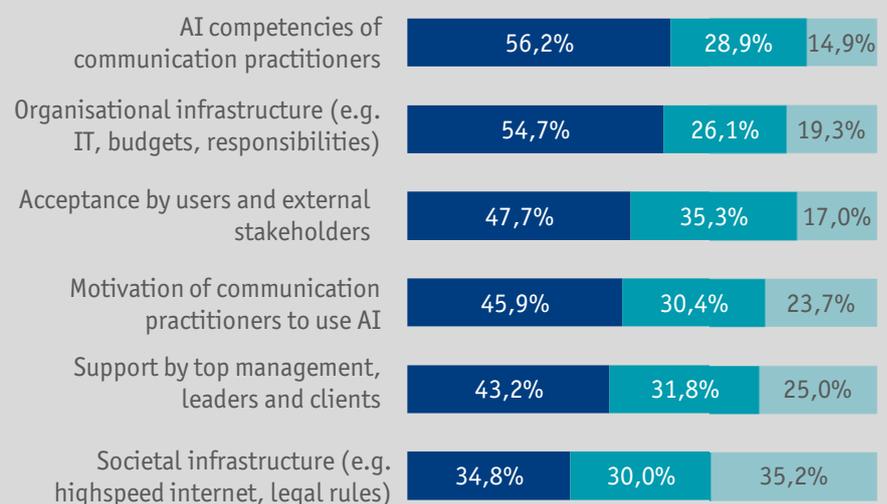
	(Very) difficult	Fairly difficult	Not or slightly difficult
AI competencies of communication practitioners	56,2%	28,9%	14,9%
Organisational infrastructure (e.g. IT, budgets, responsibilities)	54,7%	26,1%	19,3%
Acceptance by users and external stakeholders	47,7%	35,3%	17,0%
Motivation of communication practitioners to use AI	45,9%	30,4%	23,7%
Support by top management, leaders and clients	43,2%	31,8%	25,0%
Societal infrastructure (e.g. highspeed internet, legal rules)	34,8%	30,0%	35,2%

■ (Very) difficult ■ Fairly difficult ■ Not or slightly difficult

▷

Ways of applying AI at communications

Although AI technologies can support communications in various ways, nothing which involves creativity or human interaction is likely to be replaced or imitated by algorithms.

Analytics: Social media provide communicators with an unprecedentedly broad database on public opinion. News and critical issues in the corporate environment can be found there, as can insights into stakeholder opinions and their needs. For example, AI-based sentiment analysis are more accurate than other approaches to classify statements as positive, negative or neutral in real-time.

Crisis management: AI enables faster responses to crises. Real-time crawling enables AI to automatically detect or even predict threats or critical issues and notify the user. The earlier an organization is aware of a crisis, the easier it is to take the necessary action.

Communication strategy: AI can be used to analyse big data faster and more extensively, delivering better metrics to revise corporate communications strategies. It provides insights to corporate communications professionals that are valuable for decision-making.

Consulting & advising: Corporate communications has an important role to play in advising the management on trends, opportunities and risks based on AI.

Reputation management: The web offers insights and statements about organizations as well as their public perception and reputation. AI can compare these findings with the reputation of their competitors.

Targeting: AI can help to identify and target stakeholders with individual messages reflecting their interests and preferences. Groups of users reveal specific information about themselves on social media channels. This information is already being used in marketing to address customers with targeted advertising – a method which could also be applied to other stakeholder groups such as journalists, investors and employees.

Content creation: AI can be used to systematically review a large number of sources (e.g. reports, news articles) and create a summary. It can also produce texts that are short, simple or repetitive, such as posts on social media. On the other hand, AI struggles when it comes to creativity or emotional intelligence.

Chatbots: Using AI, standard enquiries from employees or customers can be answered automatically, saving time and resources for customer services. However, this technology is still prone to errors and not yet widely accepted.

Voice-assisted communication: While communicators once promoted the idea of 'mobile first', this is now changing to 'voice first'. Voice-based assistants such as Alexa, Siri and so on operate on the basis of a type of AI technology known as natural language processing – and are revolutionizing how people consume information.

Keeping tabs on ethical impacts

Society is still very ambivalent about whether artificial intelligence is a positive or negative development. Germans in particular are fairly critical. According to a study by Berlin-based market research agency Civey (2019), only around one third are positive about the future with AI, while more than 40% see mainly negative aspects.

The bad news is that a staggering 43% in Germany claim that neither stricter laws and political guidelines nor the adoption of higher ethical standards in the corporate world would persuade them to place more trust in AI. This poses a major challenge for companies and especially communicators. Nevertheless, honest and transparent communication about the usage of artificial intelligence by commercial organizations is a must.

Sources:
1) Zerfaß et al. (2019): European Communication Monitor
2) Statista / Sales Force Research (2017): https://de.statista.com/statistik/daten/studie/745360/umfrage/nutzung-und-nutzungsabsicht-von-technologien-im-marketing-weltweit/
3) Gartner (2019): Press Release from Jan 9, 2019 (www.gartner.com)