
| RESEARCH ARTICLE

AI and Its Impact on Communication

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| ABSTRACT

The application of Artificial Intelligence (AI) is rapidly changing forms of communication from personal to organizational, and even mass media. In this paper, the interrelation between AI technologies and social relationships, business communication, and mass media is examined. As noted in the study, while AI offers great efficiency, personalization, and accessibility, it brings emotional detachment, data privacy risks, ethical challenges, and others. The last part of this article is devoted to the future of AI and communication with particular respect to its responsible use, relationship between the human and machine intelligence, and other categories.

| KEYWORDS

Communication, Artificial Intelligence, human and machine intelligence, language, Impact on Emotional, Changing Roles in Media

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Introduction

In recent decades, the development of artificial intelligence (AI) has brought about major changes in the way technology interacts with humans. Artificial intelligence, which was once a futuristic concept, has now become an integral part of everyday life (Abdillah. et al. 2020). With this progress, AI has changed the way we work, learn, communicate, and even relax. However, the development of AI also poses new challenges, such as privacy, security, and ethical issues (Abdillah, et al. 2020). In an age marked by rapid technological progress, Artificial Intelligence (AI) has emerged as a revolutionizing force that is transforming nearly every aspect of human life. Perhaps one of the most profound effects it has had is on the way communication is conducted — the pillar of social bonding, business, and global interconnectivity. From voice assistants that respond and comprehend using natural language to algorithms that generate customized messages or human-like speech, AI is transforming the manner in which people communicate and express themselves.

The inclusion of AI in communications has brought unheralded efficiency, accessibility, and scalability. It has enabled real-time language translation, automated customer support, smart content generation, and even sentiment analysis. Together, these improvements also bring severe challenges: the elimination of human subtlety, privacy and monitoring issues, the spread of disinformation through deepfakes or algorithmic prejudice, and ethical concerns on authenticity and accountability.

This research analyzes the multi-faceted impact of AI on communication and its implications as well as challenges. Discussing its impact on interpersonal, organizational, and mass communication, the study will try to find a balance of how AI is revolutionizing the way we connect, collaborate, and communicate meaning in the modern digital era.

Artificial Intelligence

"The theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages." (Oxford Dictionary) Artificial Intelligence

(AI) refers to the development of computer systems that are capable of performing tasks that typically require human intelligence. Such activities include learning from experience, natural language understanding, pattern recognition, decision-making, and capacity to adapt to new conditions. Essentially, AI is aimed at simulating or replicating intellectual processes such as reasoning, problem-solving, perception, and language etc.

Key Components and Technologies in AI

Several technologies form the basis for AI systems today:

- Machine Learning (ML): A subset of AI where algorithms improve over time with exposure to data without being explicitly programmed.
- Natural Language Processing (NLP): Enables machines to understand, interpret, and generate responses to human language, both written and spoken.
- Computer Vision: Enables AI to interpret and make sense of visual information from the world, such as images or videos.
- Speech Recognition: Converts spoken language into text and has vast usage in voice assistants like Siri, Alexa, and Google Assistant.
- Generative AI: Tools like DeepSeek, ChatGPT and DALL•E that can generate human-like text, images, or other data given input prompts.

Evolution and Growth of AI

AI is not a recent invention — its conceptual roots trace back to the 1950s. However, significant advancements in computing power, big data, and deep learning algorithms in the last two decades have accelerated AI development. Today, AI is no longer confined to research labs; it is embedded in everyday tools and services, influencing sectors like healthcare, finance, education, and especially communication.

Being aware of these underlying factors of AI is essential to comprehending its growing impact on human communication, information sharing, and interaction on various platforms and in various settings. The progression of AI from theoretical investigation to extensive practical usage represents one of the most important technological stories of the 20th and 21st centuries. The sole question left is: how will AI alter the future?

AI in Interpersonal Communication

Artificial Intelligence has had a significant influence on face-to-face interaction by facilitating, enhancing, and even substituting humans engaging with one another directly. Technologies based on AI such as chatbots, voice assistants, and language translation have permeated people's everyday conversations online and offline. Not only do these technologies change the means by which people communicate but also the quality and richness of their interactions.

AI-Powered Communication Tools

We characterize AI communication tools as software or applications that utilize AI to enhance and streamline your communication methods. AI possesses the ability to forecast trends, grasp context, and automate processes, all of which can assist you in becoming a more effective communicator. Applications like Siri, Alexa, and Google Assistant use Natural Language Processing (NLP) to interpret spoken commands and respond in conversational language. Similarly, smart reply systems in email and messaging platforms (e.g., Gmail's Smart Reply) suggest brief, context-aware responses to messages, speeding up interactions (Kannan et al., 2016).

AI communication tools are taking on entire roles within communication processes. This shift starts with AI handling routine tasks, enabling employees to concentrate on more significant activities, such as engaging with customers personally. In general, AI enhances the exchange of information:

AI customizes messages, accelerating text-based communication.

AI translates messages into various languages, eliminating language barriers.

AI improves video conferencing, creating a sensation that all participants are in the same room.

AI independently contributes ideas to aid or creatively support team discussions.

AI organizes information, making it easier to make data-driven business decisions.

Real-Time Translation and Accessibility

AI-driven tools such as Google Translate and Microsoft Translator have broken language barriers in personal and professional communication. Real-time transcription services (e.g., Otter.ai) assist in inclusive communication by supporting users with hearing impairments, ensuring broader accessibility (He et al., 2020).

Impact on Emotional and Authentic Communication

While AI enhances efficiency, critics argue it can diminish emotional richness and authenticity. AI lacks true empathy and may misinterpret tone, sarcasm, or cultural nuances, potentially leading to misunderstandings or shallow interactions (Shin, 2021). Furthermore, when users interact more frequently with machines than with people, there's a risk of reduced social skills and emotional intelligence over time.

Ethical and Privacy Concerns

AI systems collect and analyze vast amounts of personal data to function effectively. This raises concerns about surveillance, consent, and data misuse. For instance, conversational AI tools may store voice recordings or message content, creating privacy vulnerabilities (Zuboff, 2019).

AI in Organizational Communication

Artificial Intelligence has revolutionized organizational communication by enhancing internal processes, customer automation, and making data-driven decisions. Small and large organizations perceive that AI-enabled solutions are reshaping how employees collaborate with each other, how businesses engage with customers, and how information is processed and relayed.

AI in Customer Service

AI chatbots and virtual assistants are widely used in customer service to handle routine inquiries, provide 24/7 support, and reduce wait times. For example, AI platforms like IBM Watson and Zendesk Answer Bot can resolve queries efficiently, escalating only complex issues to human agents (Huang & Rust, 2018). This not only improves customer satisfaction but also reduces operational costs.

Enhancing Internal Communication

Internally, AI tools assist in managing workflows and communication through intelligent automation. Slack bots, for instance, can remind teams of deadlines, summarize meetings, or schedule tasks. AI-generated meeting transcriptions and summaries (e.g., Fireflies.ai) improve record-keeping and information retrieval (Glikson & Woolley, 2020).

AI in Recruitment and HR Communication

Organizations use AI to enhance hiring practices. Natural language algorithms scan résumés, analyze candidate communication styles, and predict cultural fit. AI-driven platforms like HireVue analyze video interviews for tone, facial expressions, and word choice, aiming to identify soft skills and behavioral traits (van Esch et al., 2019). However, concerns over bias and transparency in these systems remain significant.

Case Studies and Real-World Adoption

Companies like Unilever have adopted AI in their recruitment process, combining gamified cognitive tests with AI video analysis to screen candidates, resulting in improved efficiency and reduced hiring bias (Brynjolfsson & McAfee, 2017). Meanwhile, Salesforce's Einstein AI helps businesses personalize customer communication and sales pitches based on data-driven insights.

AI in Mass Communication and Media

Artificial Intelligence is revolutionizing mass communication through the automation of content production, customization of media consumption, and the shaping of message dissemination and consumption. Newsrooms, ad agencies, and social media platforms increasingly rely on AI to respond to the demands for faster, more efficient, and data-driven communication.

AI-Generated Content

AI systems such as GPT-4, OpenAI's ChatGPT, and tools like Wordsmith (by Automated Insights) are capable of generating news articles, product descriptions, and social media posts with minimal human intervention. News agencies like the Associated Press and Reuters use AI to automatically generate financial and sports reports, reducing time and human effort (Graefe, 2016).

Personalized Communication and Algorithmic Targeting

AI enables hyper-personalization by analyzing user data to tailor content and advertisements. Platforms like Facebook, YouTube, and Netflix use recommendation algorithms to curate content feeds, thereby increasing user engagement and advertising effectiveness (Lurie & Mustafaraj, 2018). While this enhances user experience, it also raises concerns about echo chambers and algorithmic bias.

Deepfakes and Misinformation

AI technologies capable of generating synthetic media — particularly deepfakes — pose significant risks to media credibility. Deepfake videos and audio can manipulate public opinion, spread false narratives, and undermine trust in digital media (Chesney & Citron, 2019). As AI-generated misinformation becomes more sophisticated, media outlets and fact-checkers are under increased pressure to verify authenticity in real-time.

Changing Roles in Media and Journalism

AI is reshaping traditional journalism. Journalists now work alongside AI tools that assist in data analysis, trend identification, and content generation. However, the shift has also sparked debates on job displacement and the dilution of journalistic integrity. Media organizations must balance automation with ethical standards and editorial oversight (Diakopoulos, 2019).

Benefits and Challenges

Artificial Intelligence has given rise to unparalleled progress and complicated problems in communication. AI enhances the efficiency, reach, and personalization of communication, while simultaneously introducing ethics, psychology, and social concerns. There needs to be balanced analysis to discern the net contribution of AI-based communication systems.

Benefits of AI in Communication

1. Enhanced Efficiency and Speed

AI automates routine communication tasks such as responding to emails, generating reports, and moderating online discussions, thereby saving time and resources (Davenport & Ronanki, 2018). Tools like AI chatbots can respond instantly and handle thousands of queries simultaneously, which is especially valuable in customer service.

2. Improved Accessibility

AI tools have improved access to communication for people with disabilities. Speech-to-text, text-to-speech, and real-time translation services enable greater inclusivity in education, employment, and social interaction (Esteve et al., 2019). This democratization of communication has helped bridge digital and linguistic divides.

3. Personalization and User Engagement

AI allows for highly personalized content delivery based on user behavior, preferences, and location. From targeted marketing campaigns to adaptive learning platforms, AI-driven personalization increases engagement and relevance (Jarek & Mazurek, 2019).

Challenges of AI in Communication

1. Loss of Human Touch and Empathy

Despite its efficiencies, AI cannot fully replicate the emotional depth, empathy, and nuance of human communication. Overreliance on AI may lead to depersonalization in interactions, especially in healthcare, education, and counseling contexts (Shin, 2021).

2. Bias and Discrimination

AI systems learn from historical data, which may reflect societal biases. As a result, they can perpetuate stereotypes or unfair treatment, especially in hiring, content moderation, or automated responses (Noble, 2018).

3. Data Privacy and Surveillance Risks

AI systems often rely on large-scale data collection, raising concerns about surveillance, consent, and data misuse. Organizations using AI for communication must navigate privacy laws and ethical boundaries (Zuboff, 2019).

4. Dependence and Deskilling

As AI tools take over communication tasks, there is a growing risk that humans may lose proficiency in critical interpersonal and analytical skills. This deskilling could impact future generations' ability to communicate effectively without technological mediation (Glikson & Woolley, 2020).

Future Prospects

The future of AI in communication is one of transformational potential, with increased innovation, personalization, and immersion ahead. As AI technologies improve, their integration into human communication will be ever deeper — not only enhancing the manner in which we communicate but also transforming the very boundaries of what communication itself is. Yet this future demands serious ethical consideration and prudent regulation as well.

Emotional AI and Affective Computing

Emotional AI, also known as affective computing, aims to enable machines to detect, interpret, and respond to human emotions through facial expressions, voice tone, and physiological signals. Future communication tools could use emotional intelligence to provide more empathetic responses, particularly in healthcare, customer service, and education (Picard, 2000; McStay, 2020). However, such systems must balance usefulness with privacy and ethical concerns.

AI and Immersive Communication (AR/VR)

The convergence of AI with augmented reality (AR) and virtual reality (VR) will enable more immersive and interactive communication environments. For example, virtual meetings enhanced with AI-driven avatars or real-time translation and transcription can revolutionize global collaboration (Dwivedi et al., 2021). AI will also enhance digital humans or virtual influencers in social and commercial communication.

Integration with Brain–Computer Interfaces (BCIs)

Experimental developments suggest AI may eventually facilitate direct brain-to-computer communication, enabling faster and more intuitive interaction. This could particularly benefit individuals with disabilities or communication disorders (Abiri et al., 2019), but also raises questions about mental privacy and cognitive autonomy.

Evolving Legal and Ethical Frameworks

As AI's role in communication grows, so does the need for robust legal and ethical frameworks. Future regulations will likely focus on algorithmic transparency, user consent, misinformation control, and the accountability of AI-generated content (Floridi et al., 2018). Governments, developers, and civil society must collaborate to ensure responsible AI deployment.

Human-AI Collaboration, Not Replacement

The future will likely emphasize **collaboration** between humans and AI rather than full automation. AI will serve as a co-communicator, assisting rather than replacing human input. This paradigm aims to combine machine efficiency with human creativity, empathy, and ethical reasoning (Shneiderman, 2020).

Conclusion

Artificial Intelligence is increasingly transforming the world of communication — from interpersonal interactions to mass media, and from internal organizational discourse to global discourse. Its ability to automate work, personalize experiences, make things more accessible, and manage massive amounts of data has revolutionized how humans communicate, share, and cooperate.

At the social level, AI technologies like virtual assistants and live translators have made and facilitated more inclusive communication. At organizational levels, AI improves customer service, streamlines workflow, and informs decision-making with data. At mass media levels, AI assists in content creation and personalization but also fuels concerns regarding misinformation and moral integrity. The study discovers that artificial intelligence significantly influences human communication in both professional and social contexts. While AI can improve efficiency and enable interactions, it also presents difficulties concerning the maintenance of quality in social relationships and the ethics of communication. Consequently, it is vital for organizations to manage communication carefully and to make sure that the use of AI does not undermine the core values of authentic human interaction. In the future, Indonesia must persist in enhancing digital literacy and comprehension of artificial intelligence among its citizens to optimally utilize the benefits of this technology. A joint effort involving the government, industry, and educational institutions is critical to create policies and educational frameworks that tackle challenges and effectively capitalize on AI's potential.

But these benefits come with significant challenges. Issues such as loss of emotional depth, bias in AI systems, privacy risks, and potential deskilling of human communicators must be critically scrutinized. As AI technologies are advancing into areas like affective computing and brain–computer interfaces, it is necessary to create robust ethical, legal, and regulatory frameworks to guarantee their use in the right way.

Ultimately, the future of communication will not be machine-centric but the collaboration between human imagination and machine intelligence. The emphasis on cooperation, empathy, and responsibility will be key to ensuring that AI adds to and does not take away from human connection.

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References

- [1] Abdilllah, L. A., Alwi, M., Simarmata, J., Bisyr, M., Nasrullah, N., Asmeati, A., ... & Affandy, N. A. (2020). Aplikasi Teknologi Informasi: Konsep dan Penerapan.
- [2] Abiri, R., Borhani, S., Sellers, E. W., Jiang, Y., & Zhao, X. (2019). *A comprehensive review of EEG-based brain-computer interface paradigms*. Journal of Neural Engineering, 16(1), 011001.
- [3] Brynjolfsson, E., & McAfee, A. (2017). *Machine, Platform, Crowd: Harnessing Our Digital Future*. W. W. Norton & Company.
- [4] Chesney, R., & Citron, D. (2019). *Deepfakes and the New Disinformation War: The Coming Age of Post-Truth Geopolitics*. Foreign Affairs, 98(1), 147–155.
- [5] Diakopoulos, N. (2019). *Automating the News: How Algorithms Are Rewriting the Media*. Harvard University Press.
- [6] Davenport, T. H., & Ronanki, R. (2018). *Artificial Intelligence for the Real World*. Harvard Business Review, 96(1), 108–116.
- [7] Dwivedi, Y. K., Hughes, D. L., Ismagilova, E., Aarts, G., Coombs, C., Crick, T., ... & Williams, M. D. (2021). *Artificial Intelligence (AI): Multidisciplinary perspectives on emerging challenges, opportunities, and agenda for research, practice and policy*. International Journal of Information Management, 57, 101994.
- [8] Esteva, A., Robicquet, A., Ramsundar, B., Kuleshov, V., DePristo, M., Chou, K., ... & Dean, J. (2019). *A guide to deep learning in healthcare*. Nature Medicine, 25(1), 24–29.
- [9] Floridi, L., Cows, J., Beltrametti, M., Chatila, R., Chazerand, P., Dignum, V., ... & Vayena, E. (2018). *AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommendations*. Minds and Machines, 28(4), 689–707.
- [10] Glikson, E., & Woolley, A. W. (2020). *Human trust in artificial intelligence: Review of empirical research*. Academy of Management Annals, 14(2), 627–660.
- [11] Graefe, A. (2016). *Guide to Automated Journalism*. Tow Center for Digital Journalism.
- [12] Huang, M. H., & Rust, R. T. (2018). *Artificial Intelligence in Service*. Journal of Service Research, 21(2), 155–172.
- [13] He, H., Jin, D., & Tan, C. (2020). *Speech-to-Text Captioning for Accessibility: An Overview*. Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics.
- [14] Jarek, K., & Mazurek, G. (2019). *Marketing and Artificial Intelligence*. Central European Business Review, 8(2), 46–55.
- [15] Kannan, A., Kurzweil, R., Chen, G., Corrado, G., & Dean, J. (2016). *Smart Reply: Automated Response Suggestion for Email*. arXiv preprint arXiv:1606.04870.
- [16] Lurie, D., & Mustafaraj, E. (2018). *Algorithmic Personalization and Echo Chambers: A Case Study on Google News*. In *Proceedings of the 10th ACM Conference on Web Science* (pp. 323–332).
- [17] McStay, A. (2020). *Emotional AI: The rise of empathic media*. SAGE Publications.
- [18] Noble, S. U. (2018). *Algorithms of Oppression: How Search Engines Reinforce Racism*. NYU Press.
- [19] Picard, R. W. (2000). *Affective Computing*. MIT Press.
- [20] Shin, D. (2021). *The effects of explainability and causability on perception, trust, and acceptance: A case of conversational AI*. Journal of Artificial Intelligence Research, 70, 1107–1138.
- [21] Shneiderman, B. (2020). *Human-centered artificial intelligence: Reliable, safe & trustworthy*. International Journal of Human-Computer Interaction, 36(6), 495–504.
- [22] van Esch, P., Black, J. S., & Ferolie, J. (2019). *Marketing AI recruitment: The next phase in job application and selection*. Computers in Human Behavior, 90, 215–222.
- [23] Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.