

ChatGPT's Role in Helping Leaders Address Communication Challenges in the Digital Age

¹Vivin Tri Astuti, ²Iswahyu Pranawukir, ³Filda Angellia, ⁴Veronika Yuni Trisnowati, ⁵Maria Jashinta Elisabet Hamboer

¹Program Studi Magister Manajemen, Universitas 17 Agustus 1945 Surabaya, Indonesia

²Program Studi Ilmu Komunikasi, Institut Bisnis dan Informatika (IBI) Kosgoro 1957, Indonesia

³Program Studi Sistem Informasi, Institut Bisnis dan Informatika (IBI) Kosgoro 1957, Indonesia

⁴Program Studi Sistem Informasi, Universitas Jayabaya, Indonesia

⁵Program Studi Ilmu Komunikasi, Institut Bisnis dan Informatika (IBI) Kosgoro 1957, Indonesia

vivintriastuti@surel.untag-sby.ac.id, prana1enator@gmail.com, fildaibik57@gmail.com,
veronikayuni2020@gmail.com, jashinta12@yahoo.com

ABSTRACT

In today's digital age, communication is a very important aspect of leading an organisation. Organisational leaders must be able to overcome communication challenges arising from technological changes and paradigm shifts in the way people interact. The purpose of this research will conduct a comprehensive literature review to explore existing research and literature on the role of ChatGPT in helping leaders overcome communication challenges in the digital era. The current research type is qualitative. Data collection techniques include listening and recording important information to conduct data analysis through data reduction, data display, and conclusion drawing. The study results state that ChatGPT plays an important role in helping leaders face communication challenges in the digital era. In its role as a virtual assistant, the model can help leaders craft effective messages, respond quickly, translate languages, and strengthen digital presence. ChatGPT can help leaders cope with the speed and volume of information, manage misunderstandings, analyse sentiment, deal with communication crises, build relationships with audiences, provide insights and up-to-date information, and manage internal and external communications.

Keyword: ChatGPT, Leader, Communication Challenges, Digital Age

INTRODUCTION

In the contemporary era of digital advancements, effective communication plays a pivotal role in the successful management of an organization (Kraus et al., 2022) and (Sukma & Pranawukir, 2020). Organizational leaders are required to effectively navigate communication obstacles that emerge as a result of technological advancements and paradigmatic shifts in interpersonal interactions (Zen et al., 2023). One potentially effective approach involves the utilization of ChatGPT, an artificial intelligence-driven language model that holds promise in assisting leaders in navigating communication obstacles within the context of the digital era.

In contemporary business environments, there has been a notable surge in the velocity and intricacy of information dissemination (Ausat & Suherlan, 2021). Organizational executives frequently encounter the responsibility of engaging in communication with diverse stakeholders, encompassing employees, customers, business associates, and fellow leaders. Furthermore, the advent of technological advancements, such as social media platforms, online collaboration tools, and instant messaging services, has significantly transformed the modes of interpersonal communication (Subagja et al., 2022) and (Pranawukir et al., 2022). In order to maintain efficacy

within the dynamic contemporary landscape, it is imperative for corporate leaders to modify their communication strategies.

ChatGPT represents a notable instance of progress in the field of artificial intelligence, specifically designed to assist corporate executives in effectively tackling the communication obstacles prevalent in the contemporary digital era (Sudirjo, Ausat, et al., 2023). ChatGPT, a language model based on the Generative Pre-trained Transformer (GPT) architecture, undergoes training by utilizing a substantial corpus of textual data derived from diverse sources, including articles, books, and online content (Harahap, Junianto, et al., 2023). Therefore, ChatGPT possesses the capability to produce responses that are rooted in a comprehensive comprehension of the given context, thereby enabling it to offer pertinent suggestions or information.

The adoption of ChatGPT by organizational executives can yield substantial advantages. Leaders have the ability to utilize ChatGPT as a virtual assistant to aid in the development of impactful communication messages for diverse groups of individuals involved in a given context. ChatGPT possesses the capability to offer guidance pertaining to appropriate language style, accurate grammar usage, and optimal word selection within distinct communication contexts (Sudirjo, Diantoro, et al., 2023). Furthermore, ChatGPT has the capability to aid leaders in effectively handling intricate information streams through its ability to extract and promptly present pertinent information in a streamlined manner.

Nevertheless, notwithstanding the potential advantages presented by ChatGPT, there exist certain obstacles that necessitate resolution. One challenge pertains to issues regarding data security and privacy. Considering the extensive access to textual data by ChatGPT, ensuring data protection and ethical utilization becomes crucial. Furthermore, it is important to acknowledge that ChatGPT exhibits certain limitations in comprehending intricate contexts, which may result in the generation of insufficient or erroneous replies.

In this particular context, it is of utmost significance to undertake a thorough examination of the existing body of literature in order to investigate the current research and scholarly works pertaining to the utilization of ChatGPT in facilitating leaders in addressing communication obstacles within the digital era. This literature review offers a comprehensive analysis of ChatGPT's capabilities, advantages, and limitations. It aims to provide valuable insights that can assist decision-makers in making informed choices regarding the efficient and responsible utilization of this technology to tackle the communication challenges encountered in the digital era.

LITERATURE REVIEW

ChatGPT

ChatGPT is a language model that has been developed by OpenAI, utilizing artificial intelligence techniques. The acronym GPT in ChatGPT stands for Generative Pre-trained Transformer, denoting the structural design of the model. ChatGPT is specifically engineered to produce text responses that mimic human-like qualities and are relevant to the context of the conversation when interacting with users (Subagia et al., 2023). The model undergoes a "pre-training" procedure in which it is exposed to a substantial volume of textual data from diverse sources, including articles, books, and online materials. During the pre-training phase, ChatGPT acquires knowledge pertaining to the structure of language, including syntax, contextual comprehension, and word associations, based on the provided dataset. Following the pre-training phase, ChatGPT undergoes a subsequent stage known as "fine-tuning," wherein the model is assigned specific tasks and provided with feedback regarding the responses it generates. The process of fine-tuning facilitates the model's ability to adjust and conform to specific tasks and preferences as desired by the developer or user.

Within a conversational or chat setting, individuals have the ability to engage with ChatGPT by means of textual input, encompassing queries, assertions, or appeals (Fauzi et al., 2023). Subsequently, the model undertakes the task of processing the input and producing text responses that are pertinent to the given context (Ausat, Rachman, et al., 2023). The primary objective of ChatGPT is to deliver high-quality responses that mimic human-like interactions. One notable benefit of ChatGPT is its capacity to produce a wide range of responses, thereby enhancing the diversity of generated outputs (Harahap, Ausat, et al., 2023). Additionally, ChatGPT

demonstrates proficiency in comprehending and interpreting the contextual nuances of a conversation, further contributing to its advantageous features. Additionally, the AI system has the capability to offer guidance, provide factual information, and respond to inquiries by leveraging the knowledge it has acquired through pre-training and subsequent fine-tuning processes.

Although ChatGPT exhibits remarkable capabilities, it is crucial to bear in mind that this model possesses inherent limitations. Occasionally, ChatGPT may generate responses that are deemed inappropriate or less accurate, particularly in situations that necessitate a nuanced comprehension of context or specialized expertise. Hence, it is advisable for users to exercise their own discernment when engaging with ChatGPT and refrain from solely depending on the information furnished by the model.

Leader

Leaders are individuals who play a pivotal role in guiding, exerting influence, and effectively leading others towards the attainment of predetermined objectives (Dare & Saleem, 2022). Leaders can be identified within diverse settings, encompassing organizational, political, social, and other collective entities. The role of a leader encompasses the duty to make informed decisions, offer guidance, allocate resources, and facilitate the collaboration of individuals within a team or organization (Day et al., 2014). The individuals in question bear the responsibility of formulating a comprehensive vision, constructing a strategic plan, and guaranteeing the successful and efficient attainment of established objectives.

Leaders typically exhibit distinct leadership qualities that distinguish them from other individuals within a group or organization (Khoshhal & Guraya, 2016). Several prevalent leadership qualities encompass trustworthiness, integrity, proficient communication, the capacity to motivate and inspire individuals, the aptitude to make prudent decisions, and the ability to adapt to change and surmount obstacles. Leadership also encompasses the responsibility of effectively managing relationships with diverse stakeholders, including employees, customers, business partners, and the broader community. Effective communication skills and the ability to empathize are crucial components of a leader's responsibilities, particularly when confronted with communication obstacles in a multifaceted digital age (Gadzali et al., 2023) and (Angellia & Riyantie, 2020).

Within the scope of the present study, the term "leaders" pertains to individuals who undertake leadership roles within organizations or contexts that encounter communication obstacles arising from technological advancements and changes in human interaction patterns. These leaders aim to employ ChatGPT technology as a means to address communication challenges that arise in the digital era. These challenges encompass the development of effective communication messages, the management of intricate information flows, and the handling of diverse communication situations.

Communication Challenges

Communication challenges encompass the various impediments or complexities that emerge during the exchange of information and ideas among individuals or collectives (Morrison-Smith & Ruiz, 2020) and (Pranawukir & Hamboer, 2022). Within the scope of this study, communication challenges pertain to the obstacles or modifications encountered by leaders when attempting to communicate with efficacy in the digital age (Cortellazzo et al., 2019). Some common communication challenges in the digital context are as follows:

1. Limitations in nonverbal expression: Digital communication often takes place via text, email or instant messaging platforms, which omits elements of nonverbal expression such as body language, facial expressions and voice intonation. This can reduce a leader's ability to clearly convey emotions, intentions, or messages and can lead to a loss of communication context.
2. Information overload: In the digital age, the flow of information is rapid and abundant. Leaders are faced with the task of managing and filtering relevant information from multiple sources. This challenge requires the ability to manage information overload so as not to lose focus and true importance.

3. Differences in communication preferences: Every individual has different communication preferences. Some people prefer direct communication, while others are more comfortable with written communication. Leaders need to understand the communication preferences of their team members and face the challenge of creating effective communication alignment.
4. Misunderstandings and misinterpretations: In digital communication, sometimes messages can be distorted or interpreted in unintended ways. The inability to read facial expressions or voice intonation can lead to misunderstandings that can be detrimental to relationships and communication effectiveness.
5. Cross-cultural challenges: The digital age allows interaction with individuals from different cultures. Leaders are faced with the challenge of understanding and managing differences in culture, language, and communication norms that can affect understanding and effective collaboration.
6. Security and privacy: Digital communications carry security and privacy risks. Leaders need to take care to protect sensitive information and maintain privacy in digital communications.

These challenges emphasise the importance of leaders developing effective communication strategies in the digital age. Leaders need to use the right tools and technologies, such as ChatGPT, to help address these challenges and ensure effective communication with various stakeholders.

Digital Age

The term "digital age" denotes a specific era in the course of human history characterized by the pervasive influence of digital technology and electronic information across multiple domains of existence (Harini et al., 2023). The advent of the Digital Age can be attributed to substantial advancements in computer and internet technology that have occurred since the latter half of the 20th century, and this trend continues to exhibit rapid growth in the present era. The advent of the Digital Age has brought about significant transformations in various aspects of human life, including but not limited to interactions, work dynamics, communication methods, learning processes, and cognitive processes (Ausat, 2023). These changes can be attributed to the widespread utilization of digital technology and the internet. Here are some of the key features and changes in the Digital Age:

1. Access to Information: The internet allows easy and quick access to information from various sources. Data, news and knowledge can be accessed with just a few clicks, changing the way we seek and access information.
2. Communication: Digital technology has revolutionised the way we communicate. Instant messaging services, email, social media and video calling have connected people around the world quickly and efficiently. Communication has become more real-time, global and integrated.
3. Business Transformation: The Digital Age has significantly changed the business landscape. Businesses can reach a wider market through e-commerce, utilise data analysis to make better decisions, and use online collaboration tools to work remotely.
4. Technological Innovation: The Digital Age has given birth to technological innovations that are changing the way we live and work. For example, artificial intelligence, the Internet of Things (IoT), cloud computing, and blockchain technology have opened the door for new advancements in various industries.
5. Digital Dependency: In the Digital Age, many aspects of our lives are connected to digital technology. Reliance on smart devices, digital platforms, and online services has become the norm, changing the way we interact with the world around us.
6. Social Change: The Digital Age has brought about significant social changes. Online-based social interactions, participation in social movements through social media, and access to global knowledge and culture have affected the way we think, behave, and interact with others.

Overall, the Digital Age is an age where digital technology and electronic information dominate our lives, changing the way we interact, work, communicate, and adapt to changes in the world.

RESEARCH METHOD

This research aims to analyse the role of leadership in managing organisational culture change in the context of information technology implementation. In this study, the researcher conducted desk research so that there was no need to go directly to the field during the data collection process, but rather examine various reference sources that support this research. The literature was obtained from online media and databases from journal portals that match the keywords related to this discussion, namely ChatGPT's role in helping leaders address communication challenges in the digital age. The author does not focus on specific journal portals or online media in determining relevant reference sources such as referring to Emerald Insight, ResearchGate, and Elsevier journal portals, but is more flexible. In this article, with a focus on ChatGPT's role in helping leaders address communication challenges in the digital age, the author makes these keywords the focus of the search so as not to widen the main discussion. The search for journals, articles and publications was mostly in the range of articles published between 2010 and 2023. Not all articles, journals and publications that appear in the search results will be used, but only those related to ChatGPT's role in helping leaders address communication challenges in the digital age.

This research is a type of qualitative research. Data collection techniques include listening and recording important information to conduct data analysis through data reduction, data display, and conclusion drawing to obtain a picture of the conclusions regarding the literature study that will be developed in this study. Data validation uses triangulation of data sources.

RESULTS AND DISCUSSION

In the contemporary era of digital advancements, leaders across diverse domains encounter intricate and swiftly changing communication obstacles. Advancements in the field of information and communication technology (ICT) have given rise to a diverse range of communication channels, encompassing social media platforms, instant messaging applications, and online collaboration tools (Wahyoedi et al., 2023). Nevertheless, the rapid pace and intricate nature of communication in contemporary society present novel obstacles in the realm of message management and delivery. The significance of ChatGPT's contribution to assisting leaders in navigating communication obstacles in the era of digitalization cannot be understated (Ausat, Azzaakiyyah, et al., 2023). ChatGPT is a language model that has been developed by OpenAI, utilizing artificial intelligence technology. Having undergone rigorous training on a comprehensive dataset, the model exhibits a remarkable capacity to comprehend and generate text in a manner that closely emulates the human aptitude for linguistic expression and comprehension (Dwivedi et al., 2023).

One of the primary obstacles that leaders encounter in the digital era pertains to the rapidity and magnitude of information that necessitates their attention. Leaders frequently require assistance in effectively evaluating, editing, and formulating intricate messages as part of their message management responsibilities (Ausat et al., 2022). ChatGPT serves as a virtual assistant that aids leaders in formulating concise and impactful communications. The act of reviewing the grammar, style, and clarity of a message can be beneficial. Furthermore, ChatGPT has the capability to aid leaders in effectively conveying their messages across diverse digital communication platforms (Karakose et al., 2023). Leaders have the ability to utilize ChatGPT as a tool to aid them in crafting messages that align with the structure and effectiveness of a social media post or email. The model possesses the capability to offer guidance regarding appropriate writing style, the incorporation of pertinent keywords, and the construction of the message in a manner that enhances its appeal to the target audience.

In the contemporary era of digital technology, the attributes of responsiveness and personality hold significant value in the realm of leader communication. ChatGPT can serve as a valuable instrument for enhancing a leader's online visibility and facilitating prompt replies to inquiries and issues that may arise. The utilization of the model can facilitate leaders in promptly and effectively addressing emails, instant messages, or social media comments, thereby enhancing their interpersonal connections with their subordinates, peers, or supporters. Moreover, in

circumstances necessitating communication in a non-native language, ChatGPT can serve as a translation tool and aid in cross-cultural communication. Leaders operating on a global scale can employ this model as a means to effectively disseminate their messages to diverse audiences (Dwivedi et al., 2021). The model possesses the capability to facilitate the translation of messages while also considering cultural disparities and linguistic subtleties.

Nevertheless, it is imperative to bear in mind that although ChatGPT can offer significant aid in addressing obstacles related to digital communication, the expertise and comprehension of humans and the ability to grasp context remain indispensable. The utilization of the model should be regarded as a supplementary tool rather than a replacement for leaders in comprehending the intricate social dynamics, emotional aspects, and organizational regulations that form the foundation of their communications. Fundamentally, the primary function of ChatGPT is to serve as a virtual assistant that aids leaders in surmounting communication obstacles in the digital era (Sudirjo, Diawati, et al., 2023). It accomplishes this by assisting in the creation of impactful messages, facilitating prompt responses, providing language translation services, and augmenting one's online presence. Through the utilization of artificial intelligence, organizational leaders have the ability to enhance their communication strategies in the digital era, thereby improving their effectiveness in attaining organizational objectives and cultivating more robust connections with their target audiences (Haleem et al., 2022).

In addition to the previously mentioned roles, in our view for now and likely to be used massively in the future, ChatGPT can also assist leaders in overcoming communication challenges in the digital age in several additional ways:

1. **Overcoming misunderstandings:** In the context of written discourse, there are instances where the intended meaning of a message may be misconstrued or subject to ambiguity. ChatGPT possesses the capability to aid leaders in elucidating their messages and promoting enhanced comprehension. The model possesses the capability to assess and offer guidance on the lucidity and coherence of messages, thereby mitigating the potential for misinterpretations that may arise in the realm of digital communication.
2. **Analysing sentiment:** ChatGPT can additionally aid leaders in examining the overall sentiment pertaining to their message or brand across various social media or online platforms. By leveraging language and text processing models, ChatGPT has the capability to assist leaders in comprehending the responses and reactions of their audience towards their messages. This information has the potential to assist leaders in making informed decisions and enhancing their communication policies or strategies, should the need arise.
3. **Dealing with a communication crisis:** During a crisis or controversy, the importance of effective and responsive communication cannot be overstated. ChatGPT possesses the capability to aid leaders in formulating official statements, addressing inquiries and apprehensions from the public, and ensuring coherence of messaging across various communication platforms. In such circumstances, the model can function as a valuable instrument for strategizing and disseminating synchronized messages, thereby mitigating potential harm to one's reputation.
4. **Building relationships with audiences:** The process of effective communication encompasses the comprehension of the intended recipients and the capacity to adjust one's approach to align with their specific requirements and inclinations. ChatGPT has the potential to support leaders in acquiring knowledge and comprehending their audience through the examination of online communication data and patterns. Based on the provided information, leaders possess the ability to modify and tailor their messages in order to establish a more robust connection with their intended audience.
5. **Provide insights and up-to-date information:** ChatGPT can function as a prompt and precise information resource, aiding leaders in addressing inquiries, elucidating facts, or offering up-to-date perspectives. This model has the potential to aid leaders in comprehending prevailing issues, industry trends, or advancements that could potentially influence their communication strategies and decision-making processes.

It is imperative to bear in mind that although ChatGPT exhibits considerable potential in assisting leaders in surmounting communication obstacles in the era of digitalization, the efficacy

of communication ultimately hinges upon human comprehension and aptitude. Leaders must consistently refine their capacity to comprehend and analyze diverse audiences, cultivate robust interpersonal connections, and employ appropriate strategies in varying circumstances. ChatGPT can be utilized as a valuable tool that complements human expertise, aiming to enhance the efficacy of leaders' communication skills within the dynamic context of the digital era.

CONCLUSION

In summary, ChatGPT assumes a significant role in assisting leaders in navigating communication obstacles within the context of the digital era. Virtual assistants play a crucial role in assisting leaders by facilitating various tasks such as message crafting, prompt response management, language translation, and enhancement of digital presence. ChatGPT has the potential to assist leaders in effectively managing the rapid pace and substantial quantity of information, mitigating misunderstandings, conducting sentiment analysis, addressing communication crises, cultivating relationships with various audiences, offering valuable insights and current information, as well as overseeing both internal and external communications. Nevertheless, it is crucial to bear in mind that, notwithstanding the considerable capabilities of ChatGPT, the presence of human expertise and comprehension of context remains indispensable for the facilitation of effective communication. The utilization of the model should be regarded as a supplementary instrument that operates in conjunction with the proficiency and knowledge of leaders in order to attain optimal outcomes. Here are some suggestions regarding the use of ChatGPT in helping leaders face communication challenges in the digital age:

- a) Use ChatGPT as a support tool: Utilise ChatGPT's capabilities to draft, check and refine messages, but don't rely entirely on this model. Retain human expertise and understanding of the context and nuances of communication.
- b) Develop human communication skills: Continue to hone your communication skills as a leader. Audience understanding, adaptability and the ability to interact effectively are important aspects that cannot be replaced by ChatGPT.
- c) Consider social and emotional context: Although ChatGPT has artificial intelligence, it is not yet fully capable of understanding social context and emotions well. Therefore, make sure you consider these factors in your communication to create a strong connection with the audience.
- d) Stay aware of limitations and biases: Know that ChatGPT has limitations and may produce outputs that are less accurate or appropriate. Always self-verify and evaluate the messages generated by this model before delivering them to your audience.
- e) Keep up with technology: In the ever-evolving digital age, keep learning about the latest developments in communication technology and artificial intelligence. This will help you utilise new tools that can help address evolving communication challenges.

By using ChatGPT wisely and utilising it as a tool, leaders can improve their ability to overcome communication challenges in the digital age and build strong relationships with their audiences.

REFERENCES

- Angellia, F., & Riyantie, M. (2020). Strategi Komunikasi Pemasaran Kopi Melalui Digitalpreneur! Studi Kasus pada CV. Putri Cahaya Cemerlang (Kopi Oncak). *Jurnal Sistem Informasi Bisnis (JUNSIBI)*, 1(1), 1–11. <https://doi.org/10.55122/junsibi.v1i1.101>
- Ausat, A. M. A. (2023). The Application of Technology in the Age of Covid-19 and Its Effects on Performance. *Apollo: Journal of Tourism and Business*, 1(1), 14–22. <https://doi.org/10.58905/apollo.v1i1.8>
- Ausat, A. M. A., Azzaakiyyah, H. K., Permana, R. M., Riady, Y., & Suherlan, S. (2023). The Role of ChatGPT in Enabling MSMEs to Compete in the Digital Age. *Innovative: Journal Of Social Science Research*, 3(2), 622–631. <https://doi.org/https://doi.org/10.31004/innovative.v3i2.346>

- Ausat, A. M. A., Rachman, A., Rijal, S., Suherlan, S., & Azzaakiyyah, H. K. (2023). Application of ChatGPT in Improving Operational Efficiency in the Context of Entrepreneurship. *Jurnal Minfo Polgan*, 12(1), 1220–1228. <https://doi.org/https://doi.org/10.33395/jmp.v12i1.12667>
- Ausat, A. M. A., & Suherlan, S. (2021). Obstacles and Solutions of MSMEs in Electronic Commerce during Covid-19 Pandemic: Evidence from Indonesia. *BASKARA: Journal of Business and Entrepreneurship*, 4(1), 11–19. <https://doi.org/10.54268/BASKARA.4.1.11-19>
- Ausat, A. M. A., Suherlan, S., Peirisal, T., & Hirawan, Z. (2022). The Effect of Transformational Leadership on Organizational Commitment and Work Performance. *Journal of Leadership in Organizations*, 4(4), 61–82. <https://doi.org/10.22146/jlo.71846>
- Cortellazzo, L., Bruni, E., & Zampieri, R. (2019). The Role of Leadership in a Digitalized World: A Review. *Frontiers in Psychology*, 10, 1–21. <https://doi.org/10.3389/fpsyg.2019.01938>
- Dare, P. S., & Saleem, A. (2022). Toward Success While Tackling the Change in A Pandemic Age: Path-Goal Theory Leadership as a Win-Win Gadget. *Frontiers in Psychology*, 13, 1. <https://doi.org/10.3389/fpsyg.2022.944145>
- Day, D. V., Wageman, R., & Fisher, C. (2014). Who's in Charge Here? The Team Leadership Implications of Authority Structure. In *The Oxford Handbook of Leadership and Organizations* (p. 1). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199755615.013.022>
- Dwivedi, Y. K., Ismagilova, E., Hughes, D. L., Carlson, J., Filieri, R., Jacobson, J., Jain, V., Karjaluoto, H., Kefi, H., Krishen, A. S., Kumar, V., Rahman, M. M., Raman, R., Rauschnabel, P. A., Rowley, J., Salo, J., Tran, G. A., & Wang, Y. (2021). Setting the future of digital and social media marketing research: Perspectives and research propositions. *International Journal of Information Management*, 59, 102168. <https://doi.org/10.1016/j.ijinfomgt.2020.102168>
- Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koochang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M. A., Al-Busaidi, A. S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., ... Wright, R. (2023). “So what if ChatGPT wrote it?” Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A. M. A., & Hatta, H. R. (2023). Analysing the Role of ChatGPT in Improving Student Productivity in Higher Education. *Journal on Education*, 5(4), 14886–14891. <https://doi.org/10.31004/joe.v5i4.2563>
- Gadzali, S. S., Gazalin, J., Sutrisno, S., Prasetya, Y. B., & Ausat, A. M. A. (2023). Human Resource Management Strategy in Organisational Digital Transformation. *Jurnal Minfo Polgan*, 12(2), 760–770. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12508>
- Haleem, A., Javaid, M., & Singh, R. P. (2022). An era of ChatGPT as a significant futuristic support tool: A study on features, abilities, and challenges. *BenchCouncil Transactions on Benchmarks, Standards and Evaluations*, 2(4), 100089. <https://doi.org/10.1016/j.tbench.2023.100089>
- Harahap, M. A. K., Ausat, A. M. A., Rachman, A., Riady, Y., & Azzaakiyyah, H. K. (2023). Overview of ChatGPT Technology and its Potential in Improving Tourism Information Services. *Jurnal Mininfo Polgan*, 12(2), 424–431. <https://doi.org/10.33395/jmp.v12i2.12416>
- Harahap, M. A. K., Junianto, P., Astutik, W. S., Risdwiyanto, A., & Ausat, A. M. A. (2023). Use of ChatGPT in Building Personalisation in Business Services. *Jurnal Minfo Polgan*, 12(1), 1212–1219. <https://doi.org/https://doi.org/10.33395/jmp.v12i1.12666>
- Harini, H., Wahyuningtyas, D. P., Sutrisno, S., Wanof, M. I., & Ausat, A. M. A. (2023). Marketing Strategy for Early Childhood Education (ECE) Schools in the Digital Age. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 7(3), 2742–2758. <https://doi.org/10.31004/obsesi.v7i3.4454>
- Karakose, T., Demirkol, M., Yirci, R., Polat, H., Ozdemir, T. Y., & Tülübaş, T. (2023). A Conversation with ChatGPT about Digital Leadership and Technology Integration:

- Comparative Analysis Based on Human–AI Collaboration. *Administrative Sciences*, 13(7), 157. <https://doi.org/10.3390/admsci13070157>
- Khoshhal, K. I., & Guraya, S. Y. (2016). Leaders produce leaders and managers produce followers. *Saudi Medical Journal*, 37(10), 1061–1067. <https://doi.org/10.15537/smj.2016.10.15620>
- Kraus, S., Durst, S., Ferreira, J. J., Veiga, P., Kailer, N., & Weinmann, A. (2022). Digital transformation in business and management research: An overview of the current status quo. *International Journal of Information Management*, 63, 102466. <https://doi.org/10.1016/j.ijinfomgt.2021.102466>
- Morrison-Smith, S., & Ruiz, J. (2020). Challenges and barriers in virtual teams: a literature review. *SN Applied Sciences*, 2(6), 1096. <https://doi.org/10.1007/s42452-020-2801-5>
- Pranawukir, I., & Hamboer, M. J. E. (2022). Model Komunikasi Bisnis Jual Beli Buku Melalui Komunikasi Interpersonal dan Komunitas Grup Facebook. *Jurnal IKRAITH-HUMANIORA*, 6(2), 40–47
- Pranawukir, I., Misnan, M., & Alamsyah, A. (2022). Komunikasi Pemasaran Dengan Strategi Promosi Bioskop CGV Central Park Untuk Menarik Minat Penonton. *Cakrawala-Jurnal Humanioran Dan Sosial*, 22(2), 95–102
- Subagja, A. D., Ausat, A. M. A., Sari, A. R., Wanof, M. I., & Suherlan, S. (2023). Improving Customer Service Quality in MSMEs through the Use of ChatGPT. *Jurnal Minfo Polgan*, 12(2), 380–386. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12407>
- Subagja, A. D., Ausat, A. M. A., & Suherlan. (2022). The Role of Social Media Utilization and Innovativeness on SMEs Performance. *Jurnal IPTEK-KOM (Jurnal Ilmu Pengetahuan Dan Teknologi Komunikasi)*, 24(2), 85–102. <https://doi.org/https://doi.org/10.17933/iptekkom.24.2.2022.85-102>
- Sudirjo, F., Ausat, A. M. A., Rijal, S., Riady, Y., & Suherlan, S. (2023). ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age. *Innovative: Journal Of Social Science Research*, 3(2), 643–652. <https://doi.org/https://doi.org/10.31004/innovative.v3i2.347>
- Sudirjo, F., Diantoro, K., Al-Gasawneh, J. A., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Application of ChatGPT in Improving Customer Sentiment Analysis for Businesses. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(3), 283–288. <https://doi.org/https://doi.org/10.47233/jteksis.v5i3.871>
- Sudirjo, F., Diawati, P., Riady, Y., Ausat, A. M. A., & Suherlan, S. (2023). The Role of ChatGPT in Enhancing the Information Search and Decision-Making Process of Travellers. *Jurnal Minfo Polgan*, 12(2), 500–507. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12443>
- Sukma, A. H., & Pranawukir, I. (2020). Perencanaan dan Strategi Komunikasi Jaringan Franchise Warung Tegal Kharisma Bahari. *WACANA: Jurnal Ilmiah Ilmu Komunikasi*, 19(2), 274–284
- Wahyoedi, S., Suherlan, S., Rijal, S., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Implementation of Information Technology in Human Resource Management. *Al-Buhuts*, 19(1), 300–318. <https://doi.org/https://doi.org/10.30603/ab.v19i1.3407>
- Zen, A., Siminto, S., Harahap, M. A. K., Prasetya, Y. B., & Ausat, A. M. A. (2023). Effective Leadership: A Literature Review of Concepts, Characteristics, and Best Practices. *Innovative: Journal Of Social Science Research*, 3(2), 2209–2219. <https://doi.org/https://doi.org/10.31004/innovative.v3i2.430>